

# VOLUNTARY GREENHOUSE GAS REPORTING

## WORKSHOP MATERIALS AND TRANSCRIPT FOR MEETING IN

Washington DC  
November 18-19  
Hilton Crystal City

November 2002

**VOLUNTARY GREENHOUSE GAS REPORTING WORKSHOPS  
WASHINGTON DC WORKSHOP MATERIALS AND TRANSCRIPT**

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BRIEFING BOOK: CO2 REGULATION IN THE STATES

## 1. WORKSHOP AGENDA

Voluntary Greenhouse Gas Reporting Workshops

## **VOLUNTARY GREENHOUSE GAS REPORTING WORKSHOPS**

### **Workshop Agenda Washington DC November 18-19, 2002**

#### **DAY 1**

- 8:30-9:15 Welcome and Opening Remarks**  
Chairman James Connaughton, White House Council on Environmental Quality  
Deputy Secretary Samuel Bodman, U.S. Department of Commerce  
Deputy Administrator Linda Fisher, U.S. Environmental Protection Agency  
Deputy Secretary James Moseley, U.S. Department of Agriculture  
Under Secretary Robert Card, U.S. Department of Energy
- 9:15-9:30 Workshop Objective and Background.** President's charge; July 2002 recommendations; related Federal efforts; process for completion.
- 9:30-10:00 Agenda and Workshop Program**
- 10:00-12:30 Session I. Emission Reporting: Improving Accuracy, Reliability, and Verifiability.** Plenary session. Discuss options to improve emissions reporting accuracy, reliability, and verifiability. Topics:
- 1) Organizational and geographic boundaries
    - a. Corporate boundaries
    - b. Institutional / Governmental boundaries
    - c. Entity-wide v. sub-entity or project-level emissions
    - d. U.S. v. non-U.S. emissions
  - 2) Operational boundaries and related issues
    - a. Treatment of direct and indirect emissions
    - b. Gases and sources covered
    - c. Emission factors and conversion rates
    - d. Exceptions (e.g., exclusion of very small emissions)
  - 3) Measurement and accounting methods
    - a. Initial reporting year(s)
    - b. Emissions measurement / estimation methods
    - c. Confidentiality issues
    - d. Consideration of State and international reporting programs
    - e. Comparability across sectors
- 12:30-1:30 Lunch**

**1:30-3:45      Session IIa. Emission Reductions and Sequestration: Characterizing and Measuring.** Plenary session. Discuss options for defining and measuring creditable reductions. Topics:

- 1) Characteristics of creditable reductions
  - a. Output effects (CO<sub>2</sub> and / or non-CO<sub>2</sub> sources)
  - b. Other causation issues (e.g., weather, technology, regulations)
  - c. Durability
  - d. Corporate- (or entity-) wide and sub-corporate measures
  - e. Comparability within and across sectors
  - f. Offsets (outside corporate boundaries)
  - g. U.S. v. non-U.S. emission reductions
- 2) Calculation methods
  - a. Emissions intensity measures (entity-wide or sub-entity)
  - b. Projects (measured and / or estimated effects)
  - c. Absolute emissions (adjusted or unadjusted)
  - d. Base years and baselines
  - e. Multiyear reporting / averaging
  - f. Confidentiality issues
  - g. Consideration of State and international programs
- 3) Relationship with other voluntary programs (Business Challenge; Climate Leaders; previous reports under existing 1605(b) program)

**4:00-5:30      Session IIb. Emission Reductions and Sequestration.** Facilitated breakout sessions. Discuss topics from Session IIa. Final groups to be determined but could include: 1) Electric utilities, independent renewable energy producers and other electricity generators, 2) Large industries and other large emitters, 3) Small distributed sources (residential / commercial buildings and transportation) and 4) Agriculture and forestry sequesters

**5:30              Adjourn**

## **DAY 2**

**8:30-8:45      Opening Comments and Agenda for Day 2**

**8:45-10:45      Session IIc. Emission Reductions: Reports from Breakout Sessions and Discussion.** Plenary session.

**10:45-11:00      Break**

**11:00-12:30      Session III. Verifying Emissions and Reductions.** Plenary session. Options for verifying emissions and emission reduction reports. Topics:

- 1) Types and frequency of verification
- 2) Verification methods
- 3) Approving / certifying verifiers
- 4) Confidentiality issues

**12:30-1:30      Lunch**

**1:30-3:30      Session IV. Managing the 1605(b) Registry.** Plenary session. Topics:

- 1) Certifying real reductions
- 2) Confidentiality issues
- 3) Prior year reports
- 4) Not penalizing under future climate policy / transferable credits

**3:30-4:00      Wrap up and Next Steps**

**4:00              Workshop Adjourns**

## 2. BIOGRAPHIES OF DIGNITARIES OPENING WORKSHOP

Voluntary Greenhouse Gas Reporting Workshops

VOLUNTARY GREENHOUSE GAS REPORTING

BIOGRAPHIES FOR

JAMES L. CONNAUGHTON  
Council on Environmental Quality

SAMUEL W. BODMAN  
Deputy Secretary of Commerce

LINDA J. FISHER  
Deputy Administrator of the EPA

JAMES MOSELEY  
Deputy Secretary of Agriculture

ROBERT G. CARD  
Under Secretary of Energy



**JAMES L. CONNAUGHTON**  
**Council on Environmental Quality**

James L. Connaughton was unanimously confirmed by the United States Senate on June 14 and appointed by President Bush on June 18, 2001 to serve as the Chairman of the White House Council on Environmental Quality ("CEQ"). In this capacity, he serves as the senior environmental advisor to the President as well as Director of the White House Office of Environmental Policy, which oversees the development of environmental policy, coordinates interagency implementation of environmental programs, and mediates key policy disagreements among Federal agencies, state, tribal and local governments and private citizens.

Prior to joining the Bush Administration, Mr. Connaughton was a partner in the law firm Sidley Austin Brown & Wood, in its Environmental Practice Group. His work covered a wide range of environmental policy issues, including environmental management and compliance assurance systems, legislation, regulation, international trade and standards, and ecological risk and natural resource damages assessment.

From 1993 until 2001, Mr. Connaughton served as one of the lead U.S. negotiators of the International Standards Organization ("ISO") 14000 series of international environmental standards. These voluntary consensus standards govern environmental management, auditing, performance evaluation, environmental marketing claims, life cycle assessment, and product development.

Mr. Connaughton also worked with officials from U.S. EPA, California EPA, and the Environmental Law Institute to help form the Multi-State Work Group on Environmental Management Systems ("MSWG"). MSWG now includes all 50 state environmental agencies as members, and convenes government, non-government, business and academic interests to conduct research, promote dialogue, and establish partnerships that improve the environment, economy and community through systems-based public and private policy innovation.

Mr. Connaughton has extensive "hands on" experience helping organizations large (10,000+ employees) and small (less than 100 employees) become responsible environmental stewards through effective environmental management and compliance assurance systems. This work has covered the electronics, transportation, consumer products, home improvement, energy management, and mining sectors, in North America, Mexico, Venezuela and Asia.

Mr. Connaughton has lectured extensively in the U.S., Latin America, Europe, and Central Asia on international environmental standards, environment and trade, environmental management systems implementation, product regulation, and natural resource damages assessment.

Mr. Connaughton is a graduate of Yale University and graduated second in his class, *magna cum laude*, Order of the Coif, from the Northwestern University School of Law. At Northwestern, he was an Austin Scholar and served as Coordinating Articles Editor of the *Northwestern University Law Review*. Following Law School, he clerked for U.S. District Judge Marvin Aspen in the Northern District of Illinois.

**SAMUEL W. BODMAN**  
**Deputy Secretary of Commerce**

Samuel W. Bodman is the Deputy Secretary of the Department of Commerce. A financier and executive by trade, he is well suited to his role of managing the day-to-day operations of the cabinet agency with 40,000 employees and a \$5 billion budget. An engineer by training, he is well qualified for his specific oversight focus on the National Oceanic and Atmospheric Administration, the Patent and Trademark Office, and the National Institute of Standards and Technology.

With 31 years' experience in the private sector, Deputy Secretary Bodman is a firm believer in the American free enterprise system. His work in the finance industry began when he was professor at the Massachusetts Institute of Technology (M.I.T.) and started consulting with the venture capital sector. He and his partners and associates provided financial and managerial support to scores of new business enterprises located throughout the United States. Virtually all of these companies had strong dependence on technology and innovation. Many of these achieved great financial success and established public markets for their securities.

Born in 1938 in Chicago, he graduated in 1961 with a B.S. in chemical engineering from Cornell University. In 1965, he completed his ScD at Massachusetts Institute of Technology. For the next six years he served as an Associate Professor of Chemical Engineering at MIT and as Technical Director of the American Research and Development Corporation, a pioneer venture capital firm.

From there, Deputy Secretary Bodman went to Fidelity Venture Associates, a division of the Fidelity Investments. In 1983 he was named President and Chief Operating Officer of Fidelity Investments and a Director of the Fidelity Group of Mutual Funds. In 1988, he joined Cabot Corporation, a Boston-based Fortune 300 company with global business activities in specialty chemicals and materials, where he served as Chairman, CEO, and a Director. Over the years, he has been a Director of many other publicly owned corporations.

Deputy Secretary Bodman has also been active in public service. He is a former Director of M.I.T.'s School of Engineering Practice and a former member of the M.I.T. Commission on Education. He also served as a member of the Executive and Investment Committees at M.I.T., a member of the American Academy of Arts & Sciences, and a Trustee of the Isabella Stewart Gardner Museum and the New England Aquarium.

Deputy Secretary Bodman is married to M. Diane Bodman. He has three children, two stepchildren, and seven grandchildren. He and his wife reside in Washington, D.C.

**LINDA J. FISHER**  
**Deputy Administrator of the US EPA**

Linda J. Fisher, Deputy Administrator of the U.S. Environmental Protection Agency, has spent more than 17 years in government service and in the private sector devoting herself to environmental issues and improving the protection of public health in America. During her 10 plus years with EPA she served as the Assistant Administrator for Prevention, Pesticides and Toxic Substances; Assistant Administrator for the Office of Policy and Planning; and as the Chief of Staff to EPA Administrator Lee M. Thomas.

During her tenure at EPA, she has been responsible, among many projects, for working with Congress to ensure the continuation of a reformed and improved Superfund program for cleaning up toxic wastes and strengthening our nation's food safety laws. She also played an instrumental role in developing the Agency's first reports on climate change.

In addition to her EPA experience Ms. Fisher worked in the U.S. House of Representatives. In the private sector she served as an environmental attorney for the law firm of Latham & Watkins and was a Vice President of Monsanto for government and public affairs.

Ms. Fisher is dedicated to EPA's employees and workforce and has described them as "among the most skilled and dedicated public servants working in government today." She has stated that her goal in returning to EPA as its current Deputy Administrator is "to support President Bush and Administrator Whitman in working closely with local communities to ensure that all Americans have cleaner air and safe waters, and to do so in ways that make solid economic sense."

Ms. Fisher is originally from Columbus, Ohio, and received her undergraduate degree from Miami University of Ohio; her Masters degree in Business from George Washington University; and her law degree from Ohio State University.

**JIM MOSELEY**  
**Deputy Secretary of Agriculture**

Jim Moseley was sworn in as the deputy secretary by Agriculture Secretary Ann M. Veneman on July 17, 2001.

As the deputy secretary, Moseley oversees the day-to-day activities of the U.S. Department of Agriculture, one of the largest and most diverse departments in the federal government. USDA's mission includes the management of traditional farm programs, private lands conservation, domestic food assistance, agriculture research and education, agricultural marketing, international trade, meat and poultry inspection, forestry, and rural development programs.

Prior to this appointment, Moseley, an Indiana farmer with 32 years of hands-on farm experience, was the owner of Ag Ridge Farms, which specializes in grains, and managing partner of Infinity Pork, LLC, which raises hogs. Both are located in Clarks Hill, Ind.

Moseley has played a key role in developing public policy for agriculture, the environment, and natural resources conservation at the state and national levels. From 1989-1990, he served as agricultural advisor to the administrator of the U.S. Environmental Protection Agency. Moseley previously served at USDA as the assistant secretary of agriculture for natural resources and environment from 1990-1992. In this capacity, he provided leadership to the Forest Service and the Natural Resources Conservation Service on a variety of issues including endangered species, old growth forests, livestock grazing on public lands, wetlands, and policy issues related to the conservation title of the 1990 Farm Bill.

In 1997, he served as chairman of the industry negotiating team for America's Clean Water Foundation's National Environmental Dialogue on Pork Production. Following the 1995 Farm Bill, Moseley served as a consultant to the National Association of State Departments of Agriculture, where he worked with producers and NRCS to develop model resource management plans for farmers and ranchers

From 1993 to 1995, Moseley served as the director of agricultural services and regulations for the State of Indiana at Purdue University. He also served as a political analyst and member of the editorial board of the Farm Journal Publications. Moseley has held membership in numerous professional and academic organizations and has received many awards and honors. In recognition of his service and commitment to agriculture, he was voted the National Outstanding Young Farmer of America for 1982.

Moseley was born in Peru, Ind. He holds a Bachelor of Science degree in horticulture from Purdue University in West Lafayette, Ind.

**ROBERT G. CARD**  
**Under Secretary of Energy**

As Under Secretary, Mr. Card has line responsibility for Departmental operations in Energy, Science, and Environment. Energy responsibilities include renewables, fossil, nuclear and nuclear fuel cycle management, space nuclear power, power transmission, energy conservation and energy efficiency standards. In the area of science, the Department is the largest federal funder for physical sciences covering 14 national laboratories plus university and commercial research engagements. Major elements include basic energy sciences, high energy and nuclear physics, biological and environmental sciences, fusion energy and computing. Environmental operations include nuclear waste management, spent fuel retrieval from commercial, defense and international sources, and remediation of the nuclear weapons complex. Example activities of the Under Secretary during this tenure include responsibility for:

- Implementation of the President's Clean Coal and FreedomCar initiatives
- Reconfiguration of the Environmental Management program to complete public and worker risk reduction nearly 40 years earlier for over \$50 billion of cost savings
- Siting and development of the Nation's high level nuclear waste repository
- Chair of the Interagency Working Group on Climate Change Science & Technology
- Filling the Strategic Petroleum Reserve to its full capacity of 700 million barrels
- The Secretary's Nuclear Power 2010 initiative
- Management improvement initiatives including safety and security improvements, DOE order and requirements streamlining, and project management improvements

Prior to his DOE employment, Mr. Card was President and CEO, Kaiser-Hill Company, LLC. In that role he was responsible for the \$7 billion, 5,000 employee, cleanup and closure of the US Department of Energy's (DOE's) Rocky Flats site, which was formerly one of the nation's five primary nuclear weapons production sites. The plant, which contained the largest unfinished plutonium stockpile in the nation, is located in the Denver, Colorado metropolitan area. After assuming responsibility for the project in 1995, Mr. Card restructured site operations and the closure strategy to advance the planned closure schedule of 2065, at a cost \$37 billion to a closure goal of 2006, and a total cost of approximate \$7 billion.

Mr. Card also served as a Director and Senior Vice President at CH2M HILL Companies, Ltd. The Company had revenues of about \$2 billion and was one of the world's larger science, engineering, construction and operations firms. The corporation had major practices in the areas of energy & environment, water, transportation, and industrial manufacturing. Prior to the Rocky Flats assignment, Mr. Card served as Group Executive, Environmental Companies, responsible for the energy and environmental business, which was the firm's largest business practice. This business served a variety of customers including the federal government, electric utilities, oil and gas companies and other industries. Mr. Card personally managed the design and construction management of an award-winning heavy oil production project in Canada.

Mr. Card completed the Program for Management Development at Harvard Business School; received a M.S. in Environmental Engineering from Stanford University; and a B.S. in Civil Engineering from the University of Washington.

### 3. LIST OF PARTICIPANTS ATTENDING WORKSHOP

Voluntary Greenhouse Gas Reporting Workshops

Voluntary Greenhouse Gas Reporting  
Public Workshops  
Washington, DC  
November 18-19, 2002

First Name	Last Name	Title	Organization
Carlos	Alarcon	President	CO2Financial
James	Alto	Vice President	Norwest Corporation
Orestes	Anastasia	Environmental Attorney	SAIC
Margot	Anderson	Deputy Assistant Secretary	Department of Energy
Mary	Archer	Principal Env. Spec.	FPL Group
Wiley	Barbour	Director of Verification and Registry Services	Environmental Resources Trust
Pankaj	Bhatia	Associate II	World Resources Institute
Samuel	Bodman	Deputy Secretary of Commerce	Department of Commerce
David	Bonistall	Director, Sustainable Development	MeadWestvaco Corporation
Karrigan	Bork	Policy Analyst	DOT
Mike	Bowers		Department of Energy
Donna	Boysen	Policy Analyst	MJ Bradley & Associates
John	Brellenthin	Mgr, Environmental Policy & Strategy	Tennessee Valley Authority
Doug	Brookman		Public Solutions
Mary	Brooks Beatty	President	Teletrips
Jason	Burnett	Consultant	Evolution Markets consultant
Stephen	Calopedis	Energy Economist	Energy Information Administration
Ethel	Campbell	Senior Engineer	Merck & Co., Inc.
Michael	Canes	Senior Research Fellow	Logistics Management Institute
Robert	Card	Under Secretary of Energy	Department of Energy
Ian	Carruthers	Senior Executive Manager	Australian Greenhouse Office
Tom	Carter	Director for Environment, Health and Safety	Portland Cement Association
Robert	Casamento	Senior Manager	Deloitte, Touche, Tohmatsu
Michael	Cashin	Corporate Environmental Engineer	Minnesota Power, Allete
Kristin	Cecil	Engineer	DuPont
Melissa	Chan	Program Analyst	DOE/National Energy Technology Laboratory
Daniel	Chartier	President	Emissions Marketing Association
Anne	Choate	Project Manager	ICF
Paul	Cicio	Executive Director	Industrial Energy Consumers of America
Al	Cobb	Sr. Advisor	Department of Energy
Keith	Cole	Director Legislative and Regulatory Affairs	General Motors
James	Connaughton	Council on Environmental Quality	Council on Environmental Quality
Philip	Cooney	Chief of Staff	Council on Environmental Quality
Thomas	Cortina	Director	International Climate Change Partnership
Sarah	Cottrell	Research Associate	Pew Center on Global Climate Change
Cynthia	Cummis	Team Leader	US EPA
Daniel	Cunningham	Technical Specialist	Con Edison NY
Todd	Davlin	Project Engineer	Granger Electric Company
Larisa	Dobriansky	Deputy Assistant Secretary	Department of Energy
David	Doniger	Policy Director	Climate Center-NRDC
Lenny	Dupuis	Manager, Environmental Policy	Dominion
Rebecca	Eaton	Manager, Climate Savers Program	World Wildlife Fund
William	Fang	Deputy General Counsel	Edison Electric Institute
Mindi	Farber-DeAnda	Senior Analyst	SAIC
Kevin	Fay	Executive Director	International Climate Change Partnership
Richard	Fillman	Director, Energy & Envir. Reg. Affairs	Bethlehem Steel Corporation
David	Finnegan	General Counsel	Mayer, Brown, Rowe & Maw
Linda	Fisher	Deputy Administrator of the EPA	Environmental Protection Agency
Sarah	Forbes	Analyst	U.S. DOE/NETL
Stephen	Fotis	Attorney	Van Ness Feldman
Mark	Friedrichs	Policy Analyst	DOE
Sue	Gander	Outreach Director	State & Local Capacity Building Branch, US EPA
John	Garrison	International Policy Director	The Business Council For Sustainable Energy
Dee	Gavora	Director, Environmental Policy	American Forest & Paper Association
Fiona	Gilbert	Market Development Team	Australian Greenhouse Office
David	Gloski	Executive VP	ESP
Judith	Greenwald	Director of Innovative Solutions	Pew Center on Global Climate Change
Gary	Guzy	Partner	Foley Hoag LLP
Adrienne	Gvozdoch	Consultant	Navigant Consulting Inc.
Roy	Hamme	Manager, Corporate EHS Issues	Duke Energy
Reid	Harvey	Team Leader	US EPA - Clean Air Markets Division

Voluntary Greenhouse Gas Reporting  
Public Workshops  
Washington, DC  
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First Name	Last Name	Title	Organization
James	Haven	Climate Wise/Energy Star/VRGG Coordinator for	Haven & Associates
Ellen	Hawes	Research Coordinator, Climate Change Initiative	The Nature Conservancy
Juanita	Haydel	Vice President	ICF Consulting
Lou	Hayden	Washington Representative	American Petroleum Institute
Jeffrey	Henninger	Environmental Manager	Air Products & Chemicals, Inc.
Shannon	Heyck-Williams	Research Assistant	Senate Committee on Environment & Public Works
Gene	Higa	Air Quality Planning	Maryland Department of the Environment
Brian	Hinman	National Organizer, Regional Campaigns	U.S. Climate Action Network
William	Hohenstein	Director	USDA Global Change Program Office
Eric	Holdsworth	Director, Climate Programs	Edison Electric Institute
Brad	Hollomon	Program Manager	Pacific Northwest National Laboratory
Connie	Holmes	Sr. Economist	National Mining Association
James	Hough	Environmental Engineer	PSEG Services Company
Tracy	Howard	COO	AgCert International, LLC
James	Hrubovcak	Economist	USDA
Erin	Hymel	Research Assistant	The Heritage Foundation
Richard	Janoso	Project Manager-Environmental	PPL Services Corp.
Russell	Jones	Senior Economist	American Petroleum Institute
Peter	Karpoff	Economist	US Department of Energy
Daniel	Klein	President	Twenty-First Strategies, LLC
Thomas	Klotz	Consultant	Vision Environmental, Inc.
Lee Ann	Kozak	Principal Research Specialist	Southern Co.
Eric	Kuhn	Sr. Environmental Analyst	Cinergy Corp
Robert	LaCount	Director, Environmental Affairs	PG&E National Energy Group
Miriam	Lev-On	Executive Director	The LEVON Group, LLC
Perry	Lev-On	Managing Director	The LEVON Group, LLC
Marlo	Lewis	Senior Fellow	Competitive Enterprise Institute
Sandy	Libby Bourne	Director of Energy, Environment, Natural Resources, and Agriculture Task Force	American Legislative Exchange Council
Amy	Lilly	Environmental & Energy Affairs Analyst	American Honda Motor Co., Inc.
Maryalice	Locke	Aviation Emissions	US FAA
Jordan	Logue	Legislative Affairs Analyst	JEA
Paul Lynch	Lynch	Senior Environmental Engineer	KeySpan Energy
Thomas	Lyon	Gilbert White Fellow	Resources for the Future
David	Lyons	Energy Planning Mgr.	DaimlerChrysler
Drew	Malcomb		Department of Energy
Alfonse	Mannato	Director	Natsource
C.V.	Mathai	Manager for Environmental Policy	Pinnacle West
LeFranc	Maurice	Senior Policy Analyst	US EPA
Paul	McArdle	Program Manager	Energy Information Administration
Greg	McCall	Senior Engineer	American Electric Power
Elizabeth	McRoberts	Government Affairs Specialist	Hearth, Patio & Barbecue Assn
Ivor	Melmore	Senior Policy Analyst	City of Olympia
Jim	Miller	Manager, Environmental Service	Basin Electric Power Cooperative
Paul	Miller		Department of Energy
Roger	Moeller	Staff Environmental Engineer	SCS Engineers
Michael	Mondshine	Program Manager	Science Applications International Corporation
James	Moseley	Deputy Secretary of Agriculture	Department of Agriculture
Christina	Mudd	Policy Analyst	Maryland Energy Administration
Ali	Mumtaz	Environmental Engineer	Nexant, Inc.
Kym	Murphy	Senior Vice President	The Walt Disney Company
Pamela	Najor	Reporter	Bureau of Environmental News
Yutaka	Nakao	First Secretary	Embassy of Japan
John	Novak	Product Line Leader, Environment	EPRI
Doug	Obey	Associate Editor	Inside EPA
Mary	O'Driscoll	Associate	GF Energy LLC
Gary	Oshnock	Environmental and Energy Planning	DaimlerChrysler Corporation
John	Palmisano	President	Eco-Energy Trade LLC
Diana	Pape	Vice President	ICF Consulting
Tom	Peterson	Director of Domestic Policy	Center for Clean Air Policy
Davis	Phaup	Environmental Coordinator	Old Dominion Electric Cooperative



Voluntary Greenhouse Gas Reporting  
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First Name	Last Name	Title	Organization
Stuart	Price	Principal	RSVP Communications
Raymond	Prince	Economist	U.S. Department of Energy
Mary	Quillian	Manager, Environmental Programs	Nuclear Energy Institute
John	Quinn	Lead Engineer, Clean Air Issues Manager	Constellation Energy Group
Janet	Ranganathan	Director, GHG Protocol Initiative	World Resources Institute
Aaron	Rappaport	Washington Representative For Global Warming	Union of Concerned Scientists
Erik	Rasmussen	Sr. Legislative Affairs Spec.	DOE/CI-30
Stefano	Ratti	Consultant	Navigant Consulting Inc.
David	Reed	Research Associate	Bob Lawrence & Associates
Ted	Reeves	Director, Permits, Compliance & Engineering	Casella Waste Systems, Inc.
Richard	Richards	Senior Scientist	SAIC
Thomas	Richichi	Principal	Beveridge & Diamond
Michael	Rivest	Managing Director	Navigant Consulting Inc.
Michael	Rodenburg	Supervisor, Air Programs	Detroit Edison
Arthur	Rypinski	Economist	US Department of Energy
Jayanti	Sachdev	Environmental Engineer	CH2M HILL
Charles	Samuels	Counsel	Aham
Amy	Schaffer	Federal Regulatory Affairs Manager	Weyerhaeuser Company
Jake	Schmidt	Policy Analyst	Center for Clean Air Policy
Michael	Schmidt	Managing Editor	Inside Energy
Jason	Schmitz	Project Manager	CH2M HILL
Michael	Scholand	Consultant	Navigant Consulting Inc.
James	Schultz	VP, Energy & Environment	American Iron & Steel Institute
Robert	Scott	Foreign Affairs Officer	Department of State
John	Shanahan	Director, Air Quality	National Mining Association
Walter	Shaub	Science Advisor	U.S. Chamber of Commerce
Gus	Silva-Chavez	Partnership for Climate Action (PCA) Analyst	Environmental Defense
Linda	Silverman	Economist	DOE Energy Efficiency & Renew Energy
Edmund	Skernolis	Director of Government Affairs	Waste Management, Inc.
Martin	Spitzer	Professional Staff	Science Committee
John	Stamos	Nuclear Engineer	Office of Nuclear Energy, Science and Technology
John	Staub	Economist	Dept. of Energy
Gene	Steadman	Director	Celanese
Bruce	Steiner	Sr. Environmental Advisor	Collier Shannon Scott (for U.S. Steel)
Robert	Streiter	Vice President, Environment, Health, and Safety	The Aluminum Association
Mary Anne	Sullivan	Partner	Hoagan & Hertson
Megumi	Suzuki	Research Specialist	Toyota
Thomas	Sylvester	Senior Engineer	Exelon
Laura	Thomson	Project Manager	NE MD Waste Disposal Authority
Bill	Townsend	CEO	Blue Source
Don	Trilling		US DOT
Daniel	Usas	Energy Engineer	Johnson & Johnson
Boyd	Vaughan	Principal Environmental Specialist	Oglethorpe Power Corporation
Jean	Vernet	Industry Specialist	Office of Policy and International Affairs
Cheryl	Vetter	Environmental Analyst	Progress Energy
David	Wagner	Attorney	Beveridge & Diamond
David	Walker	Farm Bill Coordinator	International Assoc. of Fish and Wildlife Agencies
Jack	Weixel	Regulatory Consultant	EOP Group
June	Whelan	Director of Government Relations	National Petrochemical & Refiners Association
Mark	Whitenton	VP, Resources & Environmental Policy	National Association of Manufacturers
Carol	Whitman	Principal, Government Relations	National Rural Electric Cooperative Association
Cynthia	Wilson	President	Catalytics, Inc.
James	Wintergreen	Assistant to President	First Environment, Inc.
Kristin	Zimmerman	Manager - Energy & Global Climate	General Motors

## 4. WORKSHOP OBJECTIVE AND BACKGROUND SLIDES

Voluntary Greenhouse Gas Reporting Workshops



## **Voluntary Greenhouse Gas Reporting Workshops**

**November 18 –19**

**Washington, D.C.**

1



### **How did We Get Here?**

#### **President's Climate Change Initiative February 14, 2002**

- Set GHG Intensity Goal (18% improvement in 2012)
- Directed improvements to DOE's voluntary GHG registry
- Challenged businesses to take action

2



## What We Were Directed to Do?

- Directed the Secretary of Energy, in consultation with the Secretary of Commerce, the Secretary of Agriculture, and the Administrator of the Environmental Protection Agency, **to propose improvements to the current voluntary emissions reduction registration program** under section 1605(b) of the 1992 Energy Policy Act within 120 days. These improvements will **enhance measurement accuracy, reliability, and verifiability**, working with and taking into account emerging domestic and international approaches.
- Directed the Secretary of Energy to recommend reforms to **ensure that businesses and individuals that register reductions are not penalized under a future climate policy, and to give transferable credits** to companies that can show real emissions reductions.
- Directed the Secretary of Agriculture, in consultation with the Environmental Protection Agency and the Department of Energy, to **develop accounting rules and guidelines for crediting sequestration projects**, taking into account emerging domestic and international approaches.

3



## What is the Voluntary Greenhouse Gas Registry?

- Created by Energy Policy Act of 1992
- Managed by EIA
- Records results of voluntary measures to reduce, avoid, or sequester greenhouse gas emissions
- During 2000, total of 222 U.S. companies and other organizations filed reports
- Reporting guidelines are flexible, designed to encourage participation

4



### **Process– 2002 Actions**

- Set Goal: January, 2004
- Interagency coordination process and web site
- Issued Notice of Inquiry
- 4-Agency letter to President with recommendations
- Met with stakeholders; Hosting 4 public workshops; USDA meetings

5



### **Process – 2003 Actions**

- Accept post-workshop written comments – no deadline
- DOE drafts revised guidelines (beginning in January)
- Proposal and Public comment period (spring)
- Revise guidelines (summer/fall)
- Prepare and review new reporting forms (spring/summer/fall)
- Issue new guidelines

6



## Workshop Topics – Focus is on *Technical Issues*

Topics are built on the NOI, the 4-Agency letter, stakeholder interaction

Topics address **HOW** to “substantially improve” the registry and “protect and provide transferable credits for emissions reductions”

- I. Emissions Reporting: Improving Accuracy, Reliability, and Verifiability
- II. Emissions Reductions: Characterizing and Measuring
- III. Verifying Emissions and Reductions
- IV. Managing the Registry

7



## Crosscutting Themes

- Voluntary program, with guidelines to ensure credibility
- Balance rigor with practicality
- Build upon existing programs and protocols

8



## **Web Addresses & Points of Contact**

<http://www.pi.energy.gov/enhancingGHGregistry>

[ghgregistry.comments@hq.doe.gov](mailto:ghgregistry.comments@hq.doe.gov)

**EPA:** Reid Harvey, Cynthia Cummins

**USDA:** Bill Hohenstein, Jim Hrubovcak

**DOE/EIA:** Paul McArdle

**DOE:** Arthur Rypinski, Mark Friedrichs

## 5. PROJECTED AGENDA FOR SESSIONS I-IV

Voluntary Greenhouse Gas Reporting Workshops



# **Voluntary Greenhouse Gas Reporting Workshops**

**Washington, D.C.  
November 18-19, 2002  
Projected Agenda**

## **Emission Reporting**

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### **Organizational and Geographic Boundaries**

- What is an entity?
- How to encourage entity-wide reporting?
- Corporate and institutional boundaries?  
(Equity share? Operational control? Governance?)
- Flexibility in defining boundaries?
- Non-US emissions

## **Organizational Boundaries and Related Issues: Direct vs. Indirect Emissions**

- Should users report electricity and steam purchases?
  - How to convert to emissions?
- Other indirect emissions? Associated with materials used? Business travel? Employee commuting? Use of manufactured product?
  - How to estimate?

## **Operational Boundaries and Related Issues: Gases and Sources Covered**

- Require / encourage reports on all six UNFCCC gases? Others?
- Practical limits to emission measurement and reporting (e.g., very small sources; difficult sources to measure)

## **Measurement and Accounting Methods**

- Initial reporting year(s) (e.g., 2003 or after? 1987 or after?)
- Emissions measurement / estimation methods (fossil fuel use? Emissions of non-fossil gases?)
- Confidentiality issues (withholding some data? DOE protecting data?)
- Using state-level, international or other protocols?
- Comparability across sectors?

---

## **Emission Reductions and Sequestration**

- What are the characteristics of credible emission reductions?
- What methods should be used to produce credible estimates of such reductions?

## **Characteristics of Credible Reductions**

**Starting point: accurate, reliable, verifiable**

- Independent of changes in output?
- Independent of temporary changes in weather, capacity utilization?
- Resulting from actions of the entity being credited? Outside corporate boundaries? Outside U.S.? Double-counting?
- Reductions resulting from new investment vs. improved management?
- Mandated by government regulation or voluntary? Subsidized?
- Net entity-wide reductions or project/plant-specific reductions?
- Product manufacturers vs. end-users?
- Actions that displace/avoid emissions?

## **Calculation Methods – Units? Baseline?**

- Changes in absolute emissions?
- Emissions intensity baselines
  - Entity-wide or sub-entity
- Projects
- Calculating displaced emissions
- Minimizing double counting
- Calculating dynamic baselines
- Base years (starting when? averaged?)
- Multi-year reporting

## **Other Issues**

- Protecting confidentiality
- Existing state, international and other protocols
- Relationship to existing voluntary programs

## **Breakout Groups**

- Electricity Generation and Independent Renewable Energy  
Farragut (right side of plenary room as you face speaker)
- Industrial and other Large Sources  
Dewey (left side of plenary room as you face speaker)
- Small Distributed Sources: Residential and Commercial  
Buildings, Transportation  
Charleston I (left-hand exit, turn right, down hallway)
- Agricultural and Forestry Sequestration  
Charleston II (left-hand exit, turn right, down hallway)

#### **Breakout Groups**

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### **Electricity Generation and Independent Renewable Energy**

- Key baseline: Emissions per kWh?
- Reducing emission intensity of generator (utility) or system?
- Estimating displaced emissions?
- Treatment of acquisitions / divestitures?
- Distinctions between new investment and improved management?
- Temporary effects of weather, loads, etc. on emission intensity?
- Green power sales?
- DSM incentives / programs
- Minimizing double-counting

#### **Breakout Groups**

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### **Industrial and Other Large Sources**

- Industries or institutions with entity-wide physical measures of output, e.g., tons of cement?
- Sub-entity measures of output, e.g., for business-lines, plants?
- Economic measures of output?
- Who should choose output measures? (DOE? Industry trade groups? Individual companies / institutions?)
- If no measures of output, then what?
- Treatment of non-carbon emissions? Are output measures needed?
- Protecting confidentiality

#### **Breakout Groups**

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### **Small Distributed Sources (residential and commercial buildings, transport)**

- How to credit emission reductions by small users in residential, commercial and transportation sectors?
- Should manufacturers / builders qualify for credits? Others?
- Avoid double-counting?
- Calculation of emission reductions associated with efficient products?
- Efficiency thresholds to qualify for credits? Existing or future standards? Energy Star levels? Other?

#### **Breakout Groups**

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### **Agricultural and Forestry Sequestration**

- Methods of calculating effects of sequestration projects
- Individual projects or entity-wide actions of sequesters?
- How to ensure benefits of sequestration project are lasting

#### Verification Methods

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### **Verifying Emissions and Reductions**

- What should be verified?
  - Process and methods?
  - Data record upon which reports are based?
  - Physical measurement of emissions or fuel use?
- Verification methods
  - On-site inspections
  - Off-site reviews
- Frequency of verification
- Maintenance of records

#### Verification Methods

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### **Independent Verifiers**

- Who should qualify?
- Who should certify independent verifiers?

### **Confidentiality Issues**

- Data reviewable by:
  - Government?
  - Others?



## **Managing the Registry of Emission Inventories and Reductions**

- Certifying Real Reductions:
  - Government review process?
  - Documentation of reductions?
  - DOE database of certified reductions?
  - Documenting transfers?

## **Confidentiality Issues**

- Should all data submitted to DOE be made publicly available?
- Can DOE effectively protect confidential data?

## **Prior Year Reports**

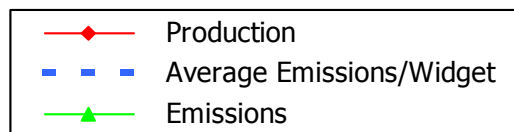
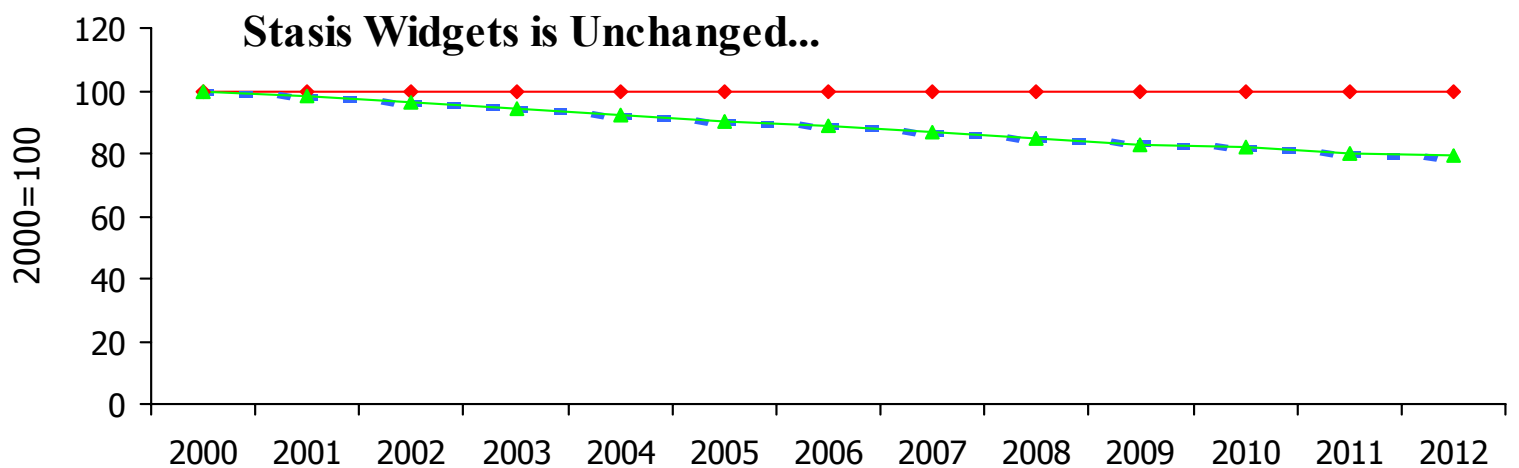
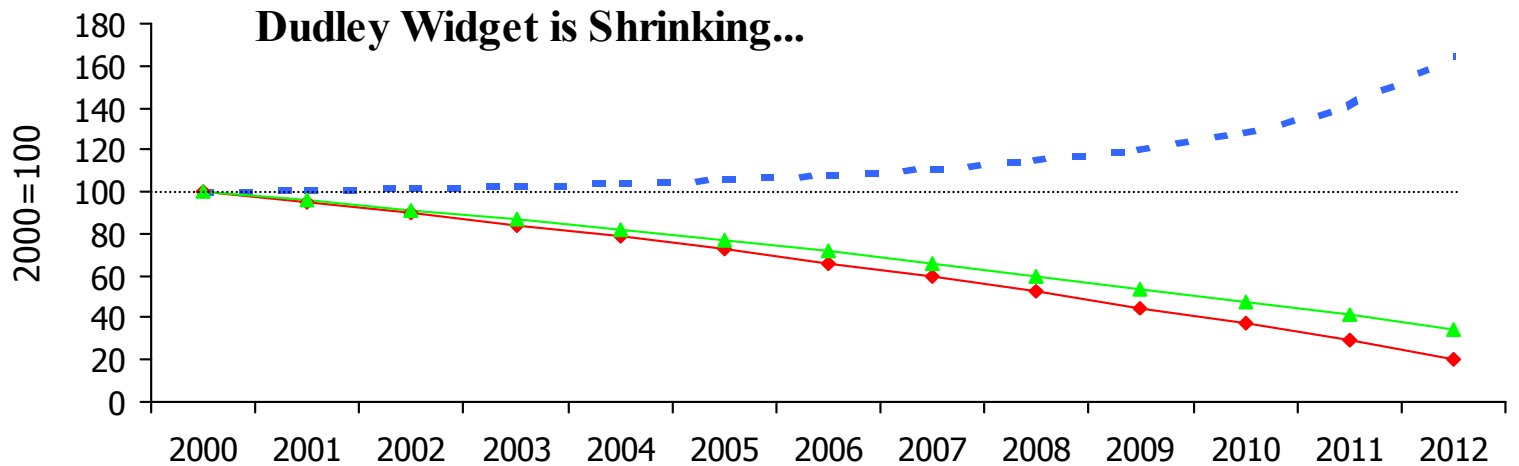
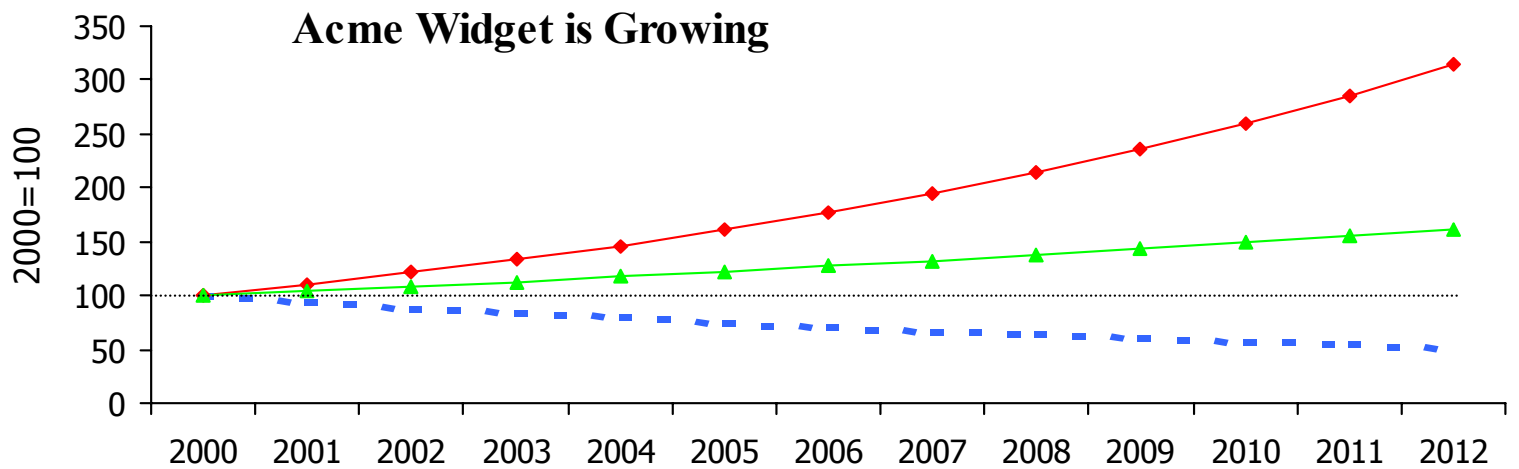
- Process to considering / revising past reports?

**Not penalizing under future climate policy /  
transferable credits?**

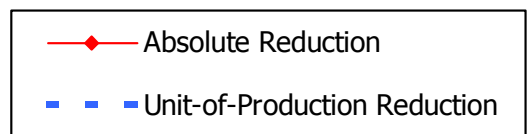
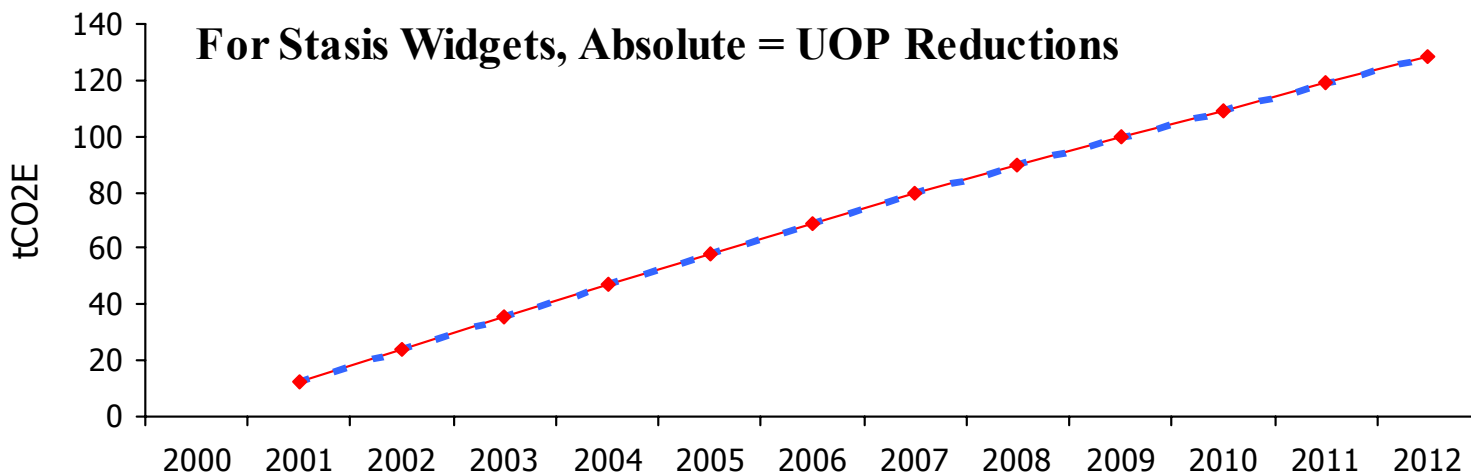
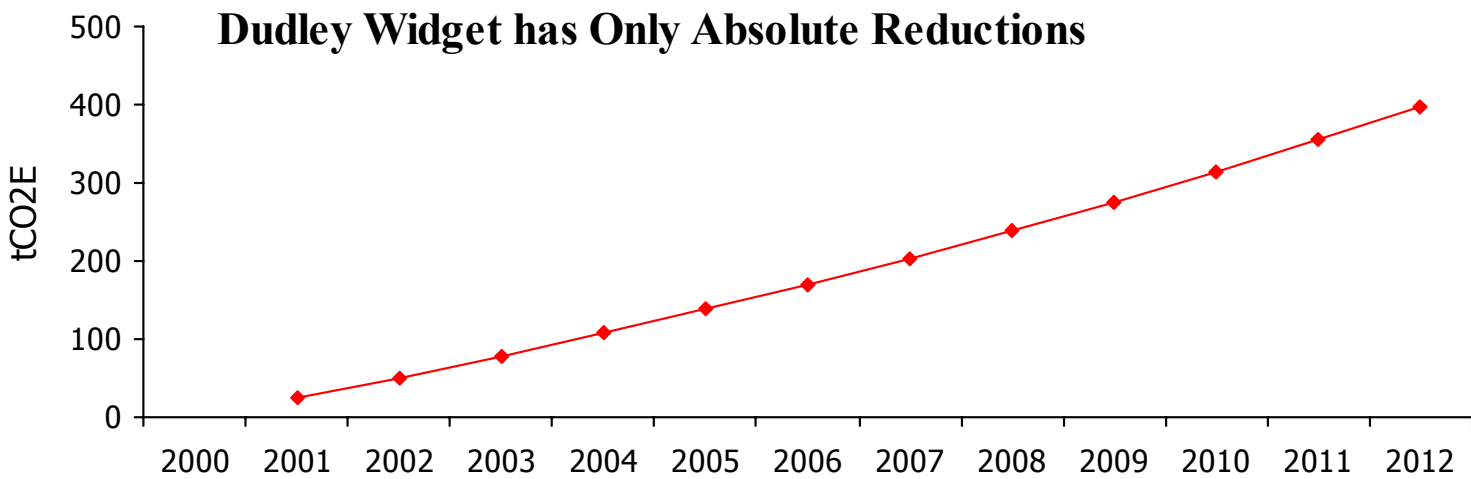
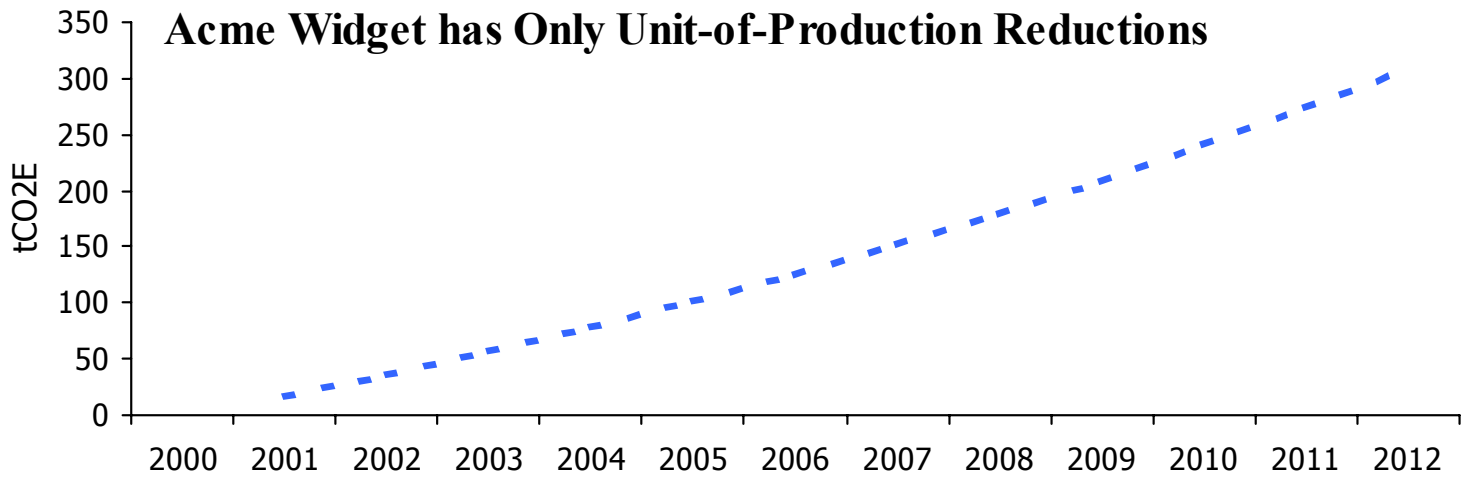
## 6. WIDGET SALES SHOWING EMISSIONS INTENSITY

Voluntary Greenhouse Gas Reporting Workshops

# America's Widget Industry



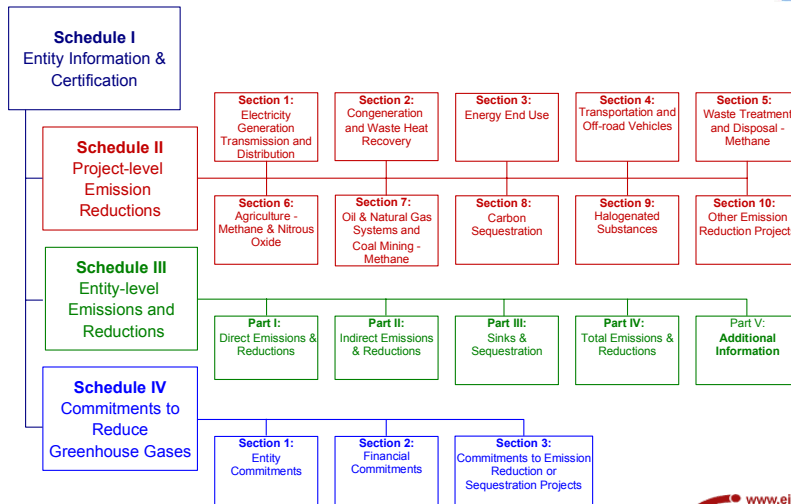
# Reductions Depend on the Baseline Chosen



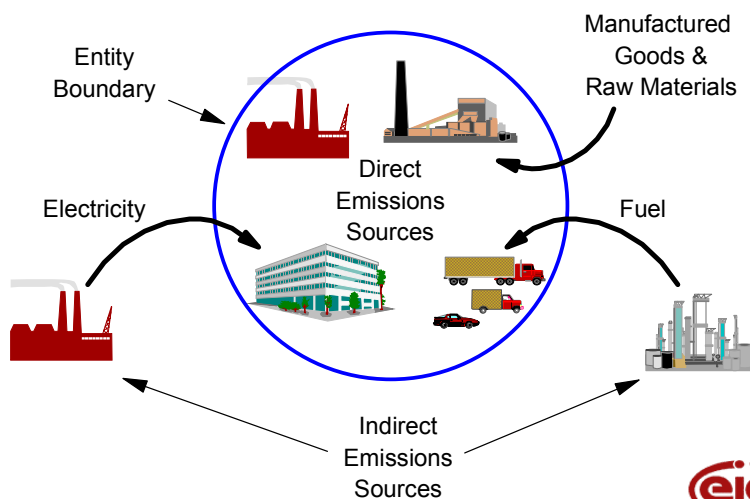
## 7. EIA WORKSHOP SLIDES ON 1605(b)

Voluntary Greenhouse Gas Reporting Workshops

# Organization of Form EIA-1605



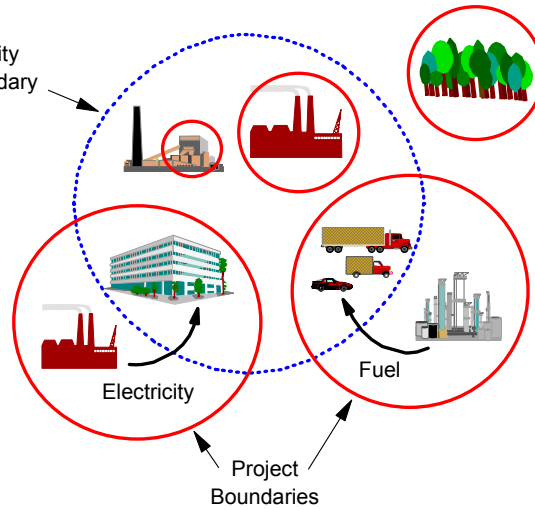
# Entity-Level Reporting



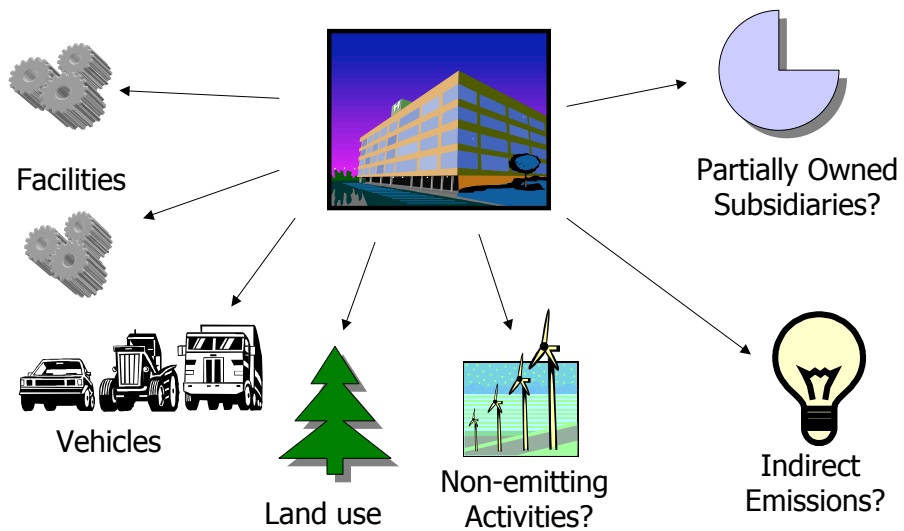
## Project-level Reporting



Entity Boundary



## A corporation reports emissions of....





## **What Does A Reporter Report?**

- Emissions of...
  - A corporation (legal ownership or control)
  - A project or activity (causation)
  - A facility or group of facilities (fence or spatial boundary)
  - A government agency (may be quasi-firm, like TVA, or activity, or a geographic area)

## 8. TRANSCRIPT OF PROCEEDINGS FOR DAY 1

Voluntary Greenhouse Gas Reporting Workshops

UNITED STATES DEPARTMENT OF ENERGY

**VOLUNTARY GREENHOUSE GAS REPORTING  
PUBLIC WORKSHOPS**

Washington, D.C.  
Monday, November 18, 2002

PROCEEDINGS

8:45 a.m.

CHAIRMAN CONNAUGHTON: Good morning. I just want to introduce myself. I am Jim Connaughton, the Chairman of the White House Council on Environmental Quality. I just want to kick this session off, this first of four workshops on the registry process. As most of you know, I'm responsible for coordinating the Administration's Cabinet-level policy review process and the director of the federal government response to this most challenging long term issue of global climate change. And so we're working on both the domestic component of that, which is what today's conversation is about, but there's also the international component, which today's and the next several workshops conversations will keenly contribute to.

I want to thank Under Secretary Bob Card for inviting me to be part of this kick off, and looking forward to the three sessions to be held in other parts of the country over the next month.

Today's purpose, and we don't need to do lots of niceties on it, we all know what we're here for, and it's to work together to improve and to add to the Department of Energy's program for the registering and crediting of voluntary greenhouse gas reductions under Section 1605 B of the Energy Policy Act of 1992.

What I wanted to do is do some brief introductions of my co-panelists as a starting point, and then make a few short remarks as to what I hope this workshop and the next three will deliver.

Let me begin with the inter-agency team, and what you have here this morning are sort of the core players in what has been a very intensive and ongoing inter-agency process for implementing the President's overall comprehensive climate change strategy, not just this one component of it.

You'll next, after me, be hearing Sam Bodman, right here to my left, Deputy Secretary of Commerce. Sam will be next year's Chairman of the Inter-Agency Working Group on Climate Change, Science, and Technology, which currently is being led over the Department of Energy. I want to recognize Sam and his team in particular for their hard work in the recently released long term strategy for how we're going to spend about \$18 billion over the next decade on scientific research related to climate change in order to improve our understanding of climate change and its effects. That ten year strategy, all 170 pages of it, was posted last week on the U.S. Global Climate Change Research Program website. So if you haven't seen it yet, I encourage you to pull it off and look forward to your comments on that. And that's being developed and released in advance of another workshop that we'll be hosting in December to discuss the climate change research programs.

To my right is Linda Fisher, the Deputy Administrator of EPA. As you all know, EPA has a proven track record of creating very successful programs with industry sectors across a variety of constituents and certainly they continue to lead the way with sectors, with companies and ordinary citizens in achieving significant, cost-effective reductions in greenhouse gas emissions.

Earlier this year, as many of you know, the EPA launched a Climate Leaders Program which has signed up 31 major companies in very focused and quantifiable efforts to reduce airborne emissions and EPA's has continued to support that program, and I think you'll hear more about that from Linda. I would note that the EPA team -- what they sort of exemplify, and this discussion we're having has received some of the output of that -- they exemplify what we're trying to accomplish across the administration, working with key sectors and key individuals throughout the economy to sort of put their oar in the water for meeting President Bush's national goal of achieving an 18 percent reduction in our greenhouse gas intensity by 2012. It is the individual actions that will be -- the work that EPA is doing, the Department of Agriculture is doing, the Department of Energy and others -- will be the work of that full array of actors that's going to help us achieve that goal.

To Linda's right is Jim Moseley, the Deputy Secretary of Agriculture. Later this week Jim and his team will be hosting a symposium in Raleigh, North Carolina, that is set out to identify how terrestrial ecosystems can be managed to optimize carbon sequestration and to reduce greenhouse gas emissions. So those of you interested in that subject, I urge you to become involved in that symposium.

1 And then finally, your primary host for today's workshop and will be supervising the  
2 activities of the next several days, is Under Secretary of Energy, Bob Card. Bob has served for the past  
3 year as the Chairman of the Administration's Inter-Agency Working Group on Climate Change, Science  
4 and Technology. As a result of Bob's focus and his efforts -- and he's got a pretty big portfolio of other  
5 interests to deal with as well -- we have made very significant progress in implementing the President's  
6 strategy for this very complicated set of issues. The work that Bob has done on marshalling the science  
7 program, marshalling the technology program and making sure that at the highest levels of administration  
8 we have coordination across the variety of mitigation strategies, Bob has just done superior work in  
9 handling that very complex puzzle. So I just want to thank him for his work to date. I know for him this  
10 set of workshops -- he's been looking forward to this for some time, to really make this process tangible  
11 and lead to real results.

12 I also want to thank his team for pulling this particular set of workshops together, and in  
13 particular recognize the white papers that you've all received. We got a lot of good comments as far as  
14 the notice, and I hope that you -- I found the white papers a good synthesis of what came in and a useful  
15 tool for getting through the next several days of discussion, and the next several months of discussion.  
16 So I want to thank them for their effort and their -- the analysis they've brought to the information we've  
17 received.

18 Finally, just want recognize Doug Brookman who will be with us as the facilitator, to  
19 keep us moving the agenda along.

20 Now, why are we here? What are we trying to achieve? Our measurement of success is  
21 very straight forward. It's to help us realize the President's charge in February of this year to enhance the  
22 current federal greenhouse gas -- greenhouse gas reduction and sequestration registry and to come up  
23 with a process for reporting transferable credits related to real reductions in greenhouse gas emissions.  
24 This registry is going to recognize greenhouse gas reductions in all sectors: by non-governmental  
25 organizations, businesses, farmers, and the federal, state and local governments. So this is a  
26 comprehensive effort, as comprehensive as we can make it.

27 Obviously our efforts are going to be consistent with the direction that we received from  
28 the Energy Policy Act in recognizing reductions through

29 1) mitigation projects that increase energy efficiency, that conserve energy and that diversifies  
30 working with energy;

31 2) to process changes of all stripes that reduce emissions of both greenhouse gases and methane;  
32 and

33 3) projects that capture and sequester greenhouse gas emissions -- so we want discrete bundles to  
34 the extent we can capture those.

35 The improvements we should make to the registry process are to enhance the  
36 measurement accuracy, enhance the reliability, and enhance the verifiability of these reductions, working  
37 with and taking into account our merging investment in international approaches. We are not working  
38 off a clean slate. A lot of effort has gone into this subject over the last decade, but it has been well  
39 recognized here in the US, and it's I think grudgingly recognized abroad that significant work is before us  
40 to really sharpen up the process, to make this as comprehensive as we can, to make it as accurate and real  
41 as we can. Accounting systems matter, especially when we measure results. And so this process is a  
42 fundamental building block of any climate change strategy.

43 Now we're hoping that through an enhanced registry, the kind we'll be talking about  
44 today, we'll be able to promote the identification and expansion of innovative and effective ways to  
45 reduce or sequester greenhouse gas emissions so this is an information pool as well. So that -- you know,  
46 economic actors and others out there across the country can look to the registry and create a little peer  
47 pressure, if you will. Well, gee, if they did it, why can't I do it? And if they can measure it this way, why  
48 can't I measure it this way? It's the good old-fashioned information out there, and let that information do  
49 what it does best, that's to spur innovation and new thinking.

50 It's also of critical importance that registry participants and the public will have a high

1 level of confidence in the reductions that are recognized by the registry. When you talk about the 18  
2 percent reduction in intensity goal, you're looking at removal of -- and avoidance of carbon monoxide and  
3 other greenhouse gases into the atmosphere. So we want to be able to make sure that there's a high level  
4 of confidence that what we're calculating, what we're recognizing is, in fact, real.

5 And then finally, as a result of that, then we want to protect and provide transferable  
6 credits related to those real emission reductions. As you know, the President directed the Secretary of  
7 Energy to recommend forms that would enable this kind of participation by businesses and individuals,  
8 by removing the risk that the action they take today that they will be penalized for the actions they take  
9 today, or their inaction will not be rewarded in the future by future climate policies. So we really want to  
10 at least to get -- create a building block of recognition that at least, from this administration's perspective,  
11 will be acknowledged and recognized with respect to any future climate policy which can involve a  
12 variety of -- could involve a variety of potential measures.

13 Of course the Secretary of Energy relies on the Council of Inter-Agency team leaders you  
14 have here before you today. He's going to need to be making a number of important decisions in the next  
15 year concerning the final design and implementation of this system. Therefore, it's really up to all of you,  
16 working closely with them, in forging as much of a consensus as we can on that design. It's going to  
17 enable us to make this happen.

18 We are on an aggressive timeline. You'll be hearing more about that in a little bit.  
19 Again, I want to thank you for your level of participation today, but the real work is really just now.  
20 Now we've got the synthesis, we've got your comments. We really have to start narrowing down the  
21 issues so that we can produce a much more reasonable product in the very near future. And  
22 therefore, on behalf of the [inaudible] team, I want to thank you all for being here today. I know there's a  
23 variety of views on some of these issues. That variety is important to us to developing self-policy, but I  
24 hope that notwithstanding the variety that this group can come together over the next several days, and  
25 with the other workshop participants, and that we can continue to narrow down further consensus-wise  
26 and then sharpen up the points where there's some real policy issues that need to be made, and we'll be  
27 making them with your input. So, I look forward to the conversation throughout these workshops.

28 What I'd now like to do is turn the floor over to Sam Bodman from the Department of  
29 Commerce, who will give you a flavor of the Department of Commerce's role in this effort. Thank you.

30 MR. BODMAN: Thank, Jim. Good morning, ladies and gentlemen. I'm very glad to be  
31 here and to be participating in this. As some of you know I came to this job out of -- having spent 35  
32 years in the private sector. The last year and a half have been a learning process, and one of the things  
33 that I've learned is that, at least given our work in Commerce, we work best when we get input from a  
34 wide variety of sources -- private sector, the environmental community and other non-government  
35 organizations. Based on my reading the list of attendees, we certainly have a wide variety of opinions to  
36 tap into and to learn from today, and as Jim said, we welcome that.

37 A couple words about the Commerce Department's involvement in global climate  
38 change. The way we're organized, as has been suggested, there is a cabinet-level committee that this past  
39 year has been chaired by Secretary Don Evans. It's the Committee on Climate Change, Science and  
40 Technology, consisting largely of cabinet members and the vice-chair is Secretary Abraham. At the end  
41 of this year these rolls switch, the idea of trying to coordinate the science, which is largely represented in  
42 the Commerce Department and the technology, which is represented in the Energy Department, and in  
43 order to have a balance there.

44 There is under that, and inter-agency working group which has the reverse roles. Bob  
45 Card, my colleague at the Department of Energy has just chaired that Working Group on Climate  
46 Change, Science and Technology, and I have been the vice chair. At the end of the year, then, we  
47 exchange roles, just as our bosses do.

48 I want to at this time, in public, thank Bob for his leadership. You've done a terrific job  
49 in getting us through this first year and organizing things, and will make my life a lot easier when I take  
50 on this role as the new year begins. And so we're, I think, set up and organized to make some real

1 progress here.

2 I am particularly pleased, when I look back over the last year, about inter-agency  
3 research efforts. This country, as many of you know, is leading the world to better understand our  
4 climate and our environment. We have spent over \$20 billion in the United States government since  
5 1990 on climate research. That's three times as much as any country. It is more than Japan and all the  
6 European nations combined. So we are -- no one criticize us, I don't believe, for lack of effort over this  
7 past ten years of investing in, and being committed to understanding what's around us.

8 Many people are not aware that within the Commerce Department there are two  
9 important activities. About 75 or 80 percent of the Commerce Department's budget really is focusing on  
10 managing our research effort -- the research and development effort. Half of our budget is involved in  
11 NOAA, the National Oceanic Atmospheric Administration, the weather service on the one hand and  
12 working on global climate change on the other. We have have the National Institute of Standards and  
13 Technology, the so-called NIST, which are -- is best thought of as our experts in government  
14 measurements, and this has worked both with industrial partners and business partners, as well as within  
15 a variety of non-governmental organizations on establishing standards so that we can measure what's  
16 around us. And as you might guess and understand, trying to measure and understand the impact of  
17 various process changes, the impact of various scientific findings, and understand just how precisely and  
18 accurately we're measuring that and understanding that is crucial.

19 NIST and NOAA are sometimes -- work together on joint projects. They've been  
20 working, for example with NASA to help calibrate satellites so that both satellites can accurately  
21 measure temperature and other properties of the earth's atmosphere, oceans and land mass, if you will, as  
22 my colleague Tony Lockenbecker (ph) talked about, trying to put a monitor on mother earth to try to  
23 understand what's happening, and they're really doing a good job on measurement. We have a long way  
24 to go there, but I think that at least we're moving in the right direction.

25 Also I recognize my colleague and friend of 40 years, Jim Mahoney, who is the Assistant  
26 Secretary for Commerce for Oceans and Atmosphere. He's the number two person, the Deputy, if you  
27 will, to Lockenbecker (ph) in NOAA. He is the director of the climate change science program, and Jim  
28 has done an extraordinary job coordinating climate research programs across 13 agencies.

29 When I first got into this I used to describe the problem -- the good news is we spent over  
30 a billion dollars on climate research; the bad news is we spend that kind of money in climate research and  
31 it's in 13 different agencies. So how do we pull this together, coordinate it, and develop a program that is  
32 integrated and make sense? And Jim has done a great job, in my view, of doing that.

33 The first formal event there, the one that's already been referred to, the climate science  
34 program, the climate science program is convening a workshop for scientists and stakeholders from  
35 around the world on December 3, 4, and 5 in Washington. It will focus on the draft US -- the draft plan  
36 for the US climate research effort. I would encourage all of you to attend that or have your colleagues  
37 attend it. There is a website -- the [www.climatesite.gov](http://www.climatesite.gov). Got the plan there and it's been up for a week or  
38 so, and we will be developing input from all manner of thinkers on these subjects and having a good  
39 discussion for another three days. Following that, there will be an effort to pull all that together, revise  
40 the plan so that we have something that hopefully will pass muster around the world.

41 I want to thank you in advance for your efforts in being here, for taking the time to  
42 contribute to this discussion, and I'll now pass this on to my colleague, Linda Fisher, who is my  
43 counterpart at the EPA, the Deputy Administrator of the EPA. She will be talking to you a bit about the  
44 importance of a high quality registry and various aspects of the volunteer program. Linda.

45 MS. FISHER: Thank you, Sam. It's a pleasure to be here today with my colleagues from  
46 the other agencies, and I also want to thank Bob Card for pulling this all together. As we begin to flush  
47 out the details of a revised 1605(b) program, we have an incredibly diverse and experienced group of  
48 people represented here today, and we hope to get the same kind of turnout at the other sessions around  
49 the country, because it is important in order to shape this registry that we hear from all of you and your  
50 thoughts and ideas.

1 This workshop is an important first step in what the President described as an effort to  
2 create a world class standard for measuring and registering greenhouse gas reductions. Our goal is to  
3 create a vigorous standard that will provide the foundation for giving companies transferable credits if  
4 they can show real emission reductions. As we develop these types of standards, it's also important to  
5 take into account our collective experience.

6 We have more than two decades of developing credit and trading programs in the US.  
7 We also have considerable know-how with measuring, reporting, verifying, and disseminating emissions  
8 data, as well as managing voluntary partnership programs with industry on climate change.

9 So what did we learn from all of this experience with these kinds of programs? What  
10 can we bring to bear on the new 1605(b) program? Well, the first lesson that we've learned is credibility  
11 is everything. The public is often skeptical about concepts like transferable credits, and they need to be  
12 convinced that credits are backed by solid documentation of real emission reductions. At the same time,  
13 for credits to have value, the market must be convinced that they are real and they are enduring.

14 The second lesson we've learned is that standards need to be transparent and as clear as  
15 possible. Our goal should be to avoid a high transaction cost that have plagued some of our credit  
16 programs to date. Clear standards also provide the market certainty, so that a company or project  
17 developer has the information that he or she needs up front, to determine whether a prospective action  
18 will, in fact, receive credit.

19 Finally, we know that emission data should be reported in a format that is easily  
20 verifiable. We should take advantage of our capability to use colorful information technology to  
21 assemble and review data. In addition, where possible -- and there might be some confidentiality issues  
22 we need to deal with -- but we should try to make emissions data available to the public.

23 In addition to our past experience, our newest partnership Climate Leaders is providing  
24 some valuable hands-on experience in projecting corporate greenhouse gas emission inventories that will  
25 help in all of our efforts. We are already seeing a number of leading companies step up to be part of the  
26 Climate Leaders program.

27 Thirty-one companies to date have joined with us, and eight companies have already  
28 announced their greenhouse gas reduction goals. These include S.C. Johnson and Sons, who has pledged  
29 to reduce greenhouse gas emissions by 23 percent of [inaudible] product between the years of 2000 and  
30 2005. Miller Brewing Company, who has pledged to reduce greenhouse gas emissions by 18 percent per  
31 barrel of production from 2001 to 2006. And Wholesome (ph) Cement, who has pledged to reduce  
32 greenhouse gas emissions by 12 percent per ton of cement from 2000 to 2008.

33 There is a lot that we can get done through common sense investments in energy  
34 efficiency as well as other technologies and practices, as EPA has seen already through our voluntary  
35 programs. I would like to summarize and highlight some of these.

36 The aluminum industry has reduced emissions of PFCs by more than 40 percent between  
37 1990 and 2000. The semi-conductor industry has agreed to reduce PFC emissions to 10 percent below  
38 1995 levels by the year 2010. Keep in mind that this is for a growing industry. The natural gas industry  
39 has reduced emissions of methane by about 13 percent through our National Gas Star partnership, and  
40 these reductions will grow over the coming years.

41 More than 7000 partners have joined the Energy Star program and are helping us avoid  
42 greenhouse gas emissions that are equivalent to 12 million cars on the road.

43 We look forward to what more can be accomplished through strong government-industry  
44 partnerships. I'd like to add that we would also be seeking input from the states as we move forward in  
45 this process. The Department of Energy will be leading a focused discussion on greenhouse gas  
46 reporting issues and changes to the 1605(b) program at the Fifth State and Local Climate Change  
47 Partners Conference next week in Annapolis. We want to see what we can do to bring the states that  
48 have already started to move out on registries and align them with the 1605(b) program that we want to  
49 develop.

50 Let me close by reiterating our commitment to this process, which alone is one of the



1 most important cornerstones of the President's initiative to reduce significantly our greenhouse gas  
2 intensity over the next decade. We look forward to working with all of you in the coming couple of years  
3 as we try to achieve this goal.

4 Next, let me introduce to you the Deputy Secretary, and good friend, Jim Moseley, from  
5 the Department of Agriculture. He will talk about their contributions to this effort. Thank you.

6 MR. MOSELEY: Thank you, Linda, and good morning. You get an A. Good morning.

7 PARTICIPANTS: Good morning.

8 MR. MOSELEY: This is an interactive process. We want to get started early this  
9 morning, right? Alright. It's good to be here. I too want to thank Bob Card and DOE for hosting this  
10 session and really taking the lead in this process to help strengthen the voluntary reporting of greenhouse  
11 gases. In particular I want to highlight and compliment Bob. As Deputies we often get caught up in a  
12 whole lot of other issues. It's pretty easy to put some of these issues that just don't come to the top on a  
13 daily basis as a crisis on the top of the list of things to do. Bob is -- he hasn't created this crisis. He's  
14 created this as an opportunity. He's done a very effective job helping all of us deputies to stay focused on  
15 this issue, and Bob, I want to thank you for your effort in that regard.

16 We are now pleased to broaden this effort and work with all of you. Our experts at  
17 USDA, and I have a couple of them here with me today, who will be at all four of these meetings to listen  
18 and learn, as we develop guidelines that are going to be the job of Forestry and Agriculture. We think  
19 that forestry and agriculture play a significant role in this whole issue.

20 Our appreciation to everyone here today. This is evidence of some strong collaboration  
21 among federal agencies, of course. It's also evidence of collaboration of state and local as well, which  
22 this administration wants to represent, which is collaborative results, reaching out to people, listening,  
23 understanding their input. Your thoughts are what this is about today, so we welcome them, and we  
24 welcome your participation, because it is important as we forge ahead and try to sort this out, that we  
25 understand what you know to help us make some decisions.

26 On the face of it, this issue is administrative. It's about accounting, reporting, rules and  
27 guidelines. USDA is as committed as every other agency represented at this table, to try to get ground  
28 level technicalities just right. But our commitment to this registry is important to getting some of these  
29 things right as well. Like moving forward on many fronts, [inaudible] partners address climate change to  
30 protect the environment for future generations. All within the framework of an innovative partner-based  
31 stewardship.

32 The concept of crediting greenhouse gas offsets fits right in with USDA's portfolio of  
33 [inaudible] conservation. It parallels our voluntary incentive based programs. Last February when  
34 President Bush announced the global climate change initiative, he said, "We will look for ways to  
35 increase the amount of carbon sequestration". The amount of carbon stored by America's farms and  
36 forests have a strong conservation tie-in.

37 Last night, Congress passed that Farm Bill, and it does have a strong conservation  
38 component. In fact, the 2002 Farm Bill is the largest commitment of resources ever to conservation on  
39 private lands in the nation's history. It strengthens programs that will have greenhouse gas offsets.

40 There's a role here for the private sector as well. Opportunities for industry, partners  
41 with farmers and landowners to address greenhouse gas emissions.

42 I'm a farmer. That's my first love. That's my vocation. I'm here in DC full time. I  
43 understand farmers. I understand how they think. And as a farmer, I want to caution you. We're going  
44 to need to manage the expectations in the agricultural community very carefully. Support can be realistic  
45 of the offsets. The demand for greenhouse gas offsets, I think especially early on, are going to be  
46 modest. Prices paid for reduction credits will likely start off being fairly low. While the demand for  
47 these offsets won't have the dramatic effect on the landscape in and of themselves. Only in a few cases,  
48 such as converting bottom lands in the Mississippi Delta to hardwoods, are companies really stepping in  
49 to financing solely the greenhouse gas offsets.

50 Realistically, agriculture and forestry offset projects are going to work best as part of a

portfolio of multiple benefits to the environment. What do I mean by that? Well, let's look at the issue of anaerobic digestion as an example. The concept and idea has been around for quite some time. We looked at it as hog producers some 20 years ago. Credits for methane reduction benefits on their own may not support an investment in technology. But combine those credits with other benefits, like public goals for water quality, other air pollutant reductions, and the whole package may well support applying that technology on a much larger scale.

And if we build that concept, then we have to develop confidence in it. Companies are understandably reluctant to participate without reliable estimates of the benefits of land management practices. Our responsibility at USDA is to take down the barriers of doubt, confusion, and uncertainty. In fact, the President said that our government will move forward to create world-class standards for measuring and registering greenhouse gas reductions.

And that's where USDA comes into the equation. Realize the heart of the President's plan, which is transferable credits. We need a first class reporting system, that's clear and concise and credible. The greenhouse gas registry, after all, will be the marketplace for companies looking for low-cost offsets. We'll get reduction credits from farmers and the other landowners for our registry's criteria.

The way we see it, for this crediting system to work, reporting guidelines must be straight forward and they have to be practical. They must be simple enough to use, offer technical support to make sure they're adopted, and most important to generate confidence in reported actions.

USDA is going to host two other meetings in January to develop these guidelines for agriculture and forestry. We'll stand behind the accuracy of the registry. We invite your participation. We recognize as we move forward that there's a lot of questions that remain to be answered. And that's probably as it should be. The government doesn't have all the answers. Fortunately, we understand that.

Questions like, how do we best build partnerships with the private sector? Greenhouse gas reductions run the gamut of agriculture's conservation activities. Where will they fit in context with the many pressing demands on USDA resources? How do we consider the role of public versus private incentives? Those are questions that we don't have all the answers to, and obviously, that's where you come in.

We are underway now, in answering those questions as we try to develop guidelines. Important decisions are going to be made in the next year, but they're decisions that are based on partnerships and the best of federal and private operations. It's important what you're doing today, to bring the public and private sector together to try to work these issues out.

I thank you for being a part of this process. It's important. We need your help. And now, to introduce Bob Card, who has led this so very well and has moved all of us in the right direction. Bob.

MR. CARD: Thanks, Jim. I won't take too long since I'm going to be around most of the day today, I'll leave some little bit of time for some questions and clarifications if we have them. I just want to echo what my colleagues have said, that I really appreciate working with them and the symbolism I hope you see up here is deliberate. We know each other. We work together all the time, and this is an integrated effort.

There are of course many other cabinet agencies that are involved in the overall effort as well, and the only reason they're not here is in respect to their time, we want to focus on the ones that had the most impact on this particular process.

But just as an example, I thought we'd just look at say an electric utility. We could have picked any business, but there are issues of ambient sequestration they'd be interested in and that's Department of Agriculture. There's relationships to what they do to other environmental issues, and EPA plays there. They want to know where the science is taking this, so they know how to place their own investments, and you heard Commerce has the lead there. They may have coal interests and there may be fugitive emissions from that coal interest, and Interior who's not here, but comes to all our organizing meetings, would play there. And then there may be residential or consumer energy conservation issues,

1 and of course we play there as well as EPA and others. And they may have international holdings, and  
2 the State Department would play there. And at State, NASA, all the agencies that might -- Department of  
3 Transportation -- that might have an interest are deeply involved with us, and all religiously attend our  
4 interagency working group meetings and Sam will make sure that that continues.

5 So as you might guess, this is a serious effort by the administration. The registry and the  
6 overall effort were very preached at that you came here these two days, and we encourage you to spread  
7 the word so that others will come to the other meetings -- both meetings on the registry, and meetings you  
8 heard about as appropriate with State, with EPA and with Agriculture.

9 Our goal is to get an "A" for process on this effort. We want to be available to you and  
10 answer. If you think we're not being available enough, please let somebody know and we'll try to rectify  
11 that. What we're after is, in addition to an integrated administration approach today, we want to be  
12 transparent and open and for opportunities for comment input.

13 This is very complex. I can assure you there is not some secret plan that we have written  
14 and just hoping that we can convince you to do it when you're all done, because there aren't clear answers  
15 to a lot of these issues. There are very important trade-offs to be made.

16 And then I encourage you today, and tomorrow, this is going to be probably the most  
17 difficult challenge -- as most of you are thinking about, well, what would I do with this when it's done?  
18 And I know that will be instinctive, but I've asked the facilitator to try to bring us back whenever  
19 possible, to let us get the accounting straight. So that when somebody says that their conditions have  
20 moved from X to Y, that everybody here says, we agree with that. You may disagree on what to do about  
21 that, or how much X to Y should have been, but at least that we agree that if somebody says that's what  
22 happened, and they did it according to this process, then we agree that that's the number. And that's the  
23 most important thing for us to sort out.

24 The next most important thing to me, is to see if we can figure out how to include areas  
25 that are not covered well by the current system, such as fugitive emissions, such as consumer-oriented  
26 emissions where there's just not a reason for consumers, because they're too small, usually, to participate  
27 in the registry.

28 And I know we're trying to cram five pounds of potatoes or whatever your commodity is  
29 -- I don't know if Jim likes to favor one lately -- corn -- into one pound bag, so the workshop schedule  
30 was a trade-off between what it would take to really cover the waterfront, and how much time you all are  
31 willing to commit. So hopefully, we've managed that well.

32 Just real quickly. You've heard some of the other efforts ongoing, but knowing that we  
33 had representatives of many, if not most, of the most active stakeholders here on the overall climate  
34 issue, we just want to make sure that you understood everything that's going on.

35 Jim Connaughton talked about sort of the basis of what we're doing in the President's  
36 announcements in February, and a year ago in June. You heard about the research programs being  
37 integrated by Commerce. We have a technology program that's integrated by the Department of Energy  
38 which roughly matches the research program -- about \$2 billion a year. I could spend more time with you  
39 one on one on that later. International, of course, is very active, led by Paula Dobriansky (ph) with State.

40  
41 We have the registry, we have voluntary programs, some of which were alluded to, but  
42 there's actually more than were discussed today, and then there's tax incentives that you've seen show up  
43 in various places, such as the administration's support of the energy bill that didn't happen.

44 So with that, I'm going to conclude my remarks and let's see if there's some questions  
45 before the panelists, except me, will all be leaving promptly when we're done with this session.

46 FACILITATOR BROOKMAN: Questions -- we have time for a few brief questions.  
47 Push the button on your microphone, ladies and gentlemen. This session is taped, so this is on the record.  
48 And if you can be brief, we appreciate it.

49 MR. SHAUB: This is a question, I guess, all the panelists. How do you envisage  
50 harmonizing the ongoing efforts of the United States with registering efforts in other countries

1 internationally?

2 FACILITATOR BROOKMAN: I'm hoping not the entire panel will answer that.

3 CHAIRMAN CONNAUGHTON: By the way, who was the questioner?

4 MR. SHAUB: Walter Shaub, U.S. Chamber of Commerce.

5 CHAIRMAN CONNAUGHTON: The President's charge does actually take into account  
6 emerging domestic approaches and international approaches, of which there are several and they're input  
7 into this process. We will be working to look very closely at what's being developed internationally and  
8 we'll, through the State Department process, in talking with the other conference and party members,  
9 continue to feed into that enterprise as it unfolds at the international political arena. There are also  
10 several other international initiatives underway, whether it's under the auspices of the World Business  
11 Council for sustainable development. I recall that WRI effort, an international effort, and then the  
12 International Standards Organization has just embarked on a process of trying to harmonize these  
13 emerging approaches.

14 We're going to treat this like many other standards-setting efforts. We'll lead. We'll  
15 inform with our approach. We'll pay close attention to what's happening with these other approaches,  
16 and we'll continually seek to harmonize as appropriate. I think the classic statement from the  
17 standardization world is you need innovation before standardization, and then we've had some very good  
18 innovation over the last decade, we can begin to harmonize and standardize. We also have to keep a keen  
19 eye to the fact that I don't think any of us is going to come up with any perfect regimes. We need to come  
20 up with a very, very good regime and then be sure to get a process that runs fairly frequently, a process  
21 for further learning and further refining what we're doing. It is several moving pieces, but working with  
22 about 20 moving pieces -- it's a smaller stack, and that's how we're going to try to manage it.

23 FACILITATOR BROOKMAN: One or two more quick questions. Please use the  
24 microphone.

25 MS. QUILLIAN: I am Mary Quillian, represent the Nuclear Energy Institute. And  
26 there's an expression reduction that's bantered around this morning and will continue to be bantered  
27 around all day, and I think that it would be helpful if you all could define, perhaps, what you consider  
28 reductions before we get started in our discussions.

29 FACILITATOR BROOKMAN: I promise you at minimum, we'll be picking it up in  
30 great deal in these sessions. I promise you that. Panel?

31 MR. CARD: Well, very simply, reductions or increases is something that change from  
32 point A to point B. I know your question is not trivial, but getting back to the counter, what we would  
33 look at is, does the registry system measure at one point in time or does it measure something else at  
34 another point in time? If you get to, well, there should have been something or there could have been  
35 something else different, and that would evolve into a policy question. For example, somebody could  
36 have done something else and therefore there was a reduction from what they might have done. That  
37 represents a policy issue of what should be counted. So again, we'll try to keep our focus, not that that  
38 isn't fair game here, I just want to take every opportunity, particularly this morning as we begin the  
39 discussion, to clarify the difference between policy options of what you might do, versus how we account  
40 for things.

41 FACILITATOR BROOKMAN: Thank you.

42 MR. BODMAN: Could I say one thing. We want to hear from you. We have many  
43 representatives of the private sector as well as the environmental community and other organizations, and  
44 the primary purpose of the whole thing is to listen to all of you. For example, when do you start  
45 [inaudible] started last year. I came from the private company. That company is now doing less business  
46 this year than they did last year and therefore if I'm running the company, my instincts are well, I rather  
47 start measuring a year ago when I was creating more greenhouse gases and I guess I get credit for that  
48 reduction that occurred from last year to this year. Is that reasonable? Is it not reasonable? I think these  
49 are very tough and challenging questions. We're trying to strike a balance, which is what this group's  
50 challenge is. So we're very eager to hear from you as to what you think would satisfy your constituencies

as well as --

FACILITATOR BROOKMAN: Yes, your name, please. Push the button down.

MR. DONIGER: Hi. I'm David Doniger, All Natural Resources -- Just a comment to pick up on one of Bob Card's comments. That if the goal is to develop guidelines which there could be general agreement on as credible, good and well-accounted, then I would like to suggest that the focus be on emissions, and not on the reductions. This is where it will be possible to get some general agreement on approaches and not this for credible accounting. Reduction accounting experience under 1605(b), probably already demonstrates the futility of trying to come up with a credible basis of production accounting. We would like to first focus on emission, because that's the place where we might be able to find some broad consensus. Thank you.

FACILITATOR BROOKMAN: I see a follow-up comment right here.

MR. LEWIS: My name's Marlow Lewis, I'm with the Competitive Enterprise Institute. Bob Card, I just want to say once again that I think you guys deserve an "A" for process, but my question has to do with substance. Bob, you mentioned that many people are wondering well, what do we do with all this once it's done? And you recommended that we first concentrate on getting the accounting system right so that we can agree on numbers, and then later on we'll figure out what those numbers mean and what we can do with them in a policy context.

But it seems to me that the prior question, at least in the order of importance, is do we have the legal authority to do anything once we have the numbers? And CEI is a watchdog group, so pardon me if I'm a bit of a skunk at the garden party here, but Senator Lieberman in two Congresses attempted to enact credit for early action legislation, and that legislation went nowhere. Are we to understand that Congress somehow wanted an enacted 1605(b) seven years before Senator Lieberman ever introduced his bills, implicitly enacted the substance of those bills and gave the Executive Branch authority to order transferable credits?

I hope that at some point today there will be a discussion of the legal authority for transferable credits because if there isn't any, then this may be much ado about nothing, and that would not be a good expenditure of everybody's time.

MR. CARD: We don't think it's much ado about nothing, but is there -- where's Margot? My sort of lifeline now. Are we going to talk about that, Margot?

MS. ANDERSON: We are going to --

MR. CARD: We will find a time to talk about that because I hate to rile up the crowd by taking it on right here just as we have a minute or two left of this session.

CHAIRMAN CONNAUGHTON: I would note that that's -- this is an important issue. I would commend a small group of people to get together to perhaps hash through that particular point. I would note, on the transferable credit point, while we will talk to the authority, and we think there is authority for a fairly straight forward approach on this, I think the fact of the matter is not so much the external legal authority, trying to come up with a credible system of doing emissions accounting, a credible system of understanding what reductions are.

There's a futures market that's out there today that exists without authority and it exists with a fair level of lack of certainty, lack of definition, like many other futures markets. Futures markets tend to become even more interested in accounting that's sharpened and certainly it's [inaudible] administration as we sharpen our accounting tools, that futures market itself will become a little more -- a little more receptive to what's happening.

Now, as a futures market, it is based on speculation and risk. Personally, this administration is banking on the fact that the suite of measures that the President has put forward, including advancing the science, advancing technologies, crediting incentives, mandatory programs we have on the books, the voluntary programs we have on the books that we're moving forward with; on the collective of state activity with respect to their localized stakeholders -- we're banking on the fact that that futures market is going to be pretty -- the value is going to be pretty small, because we're making real progress against the President's goal.

1 And so even as we get into the legal questions, legal authority, our strategy is not  
2 dependence on boundaries of that nature in terms of what we're able to achieve with our existing  
3 portfolio of activities, and the existing discretionary authority the administration has to undertake those  
4 actions.

5 More importantly, the ability of the private sector to just mobilize on its own. You don't  
6 need legal authority for that either. So I hope that discussion, for the smaller folks, and doesn't consume  
7 too much of this group's time. We'll be getting into plenty of that discussion in the course of how to  
8 move forward the program. The legal question, in fact, will answer itself one way or the other when  
9 we're done because the scope of what this group talks about and the consensus they achieve will help  
10 define how that [inaudible] with any particular legal framework.

11 FACILITATOR BROOKMAN: Okay, thank you. And with that I'm going to ask  
12 everybody to thank the panel.

13 (Applause and pause as panel leaves the room.)

14 FACILITATOR BROOKMAN: Just a quick comment is I think we should identify who  
15 the people from the federal government are playing here, because there's actually many key  
16 representatives that'll be hanging around today. So if those of you who are -- you want to do it? Okay,  
17 great. I'll just sit down then.

18 MS. ANDERSON: Good morning everybody. My name is Margot Anderson and I'm  
19 with the Department of Energy, and I've been working with the interagency team to put on these  
20 workshops over the next month or so, and we've been working on the various aspects of 1605(b) since  
21 February of 2002. We expect to work on it for a good time yet to come.

22 I just want to reiterate some of the things that we heard this morning from our  
23 distinguished panel and sort of set the stage for what we're going to do today. I also have a couple of  
24 slides talking about the process forward when we get done with the workshops. Many of you have asked  
25 about what's going to happen next year, and I want to assure you about what our time line is so that you  
26 can continue to participate at any level you want to participate.

27 Almost every one of our panelists indicated, what are we doing here? And the reason  
28 that we're here is all has to do with the February 14th announcement of the President where he did set the  
29 GHG intensity improvement goal for 2012 for 18 percent. He directed improvements in the DOE  
30 voluntary greenhouse gas registry. He challenged businesses and with you, to take actions to reduce  
31 greenhouse gases. There were many other components of the Climate Change Initiative, but these are the  
32 ones that concern us most today.

33 Next slide please. This is a lot of words, but this is the verbatim of what the President  
34 asked us to do. What's most important is there in red; to propose improvements in the current voluntary  
35 emission production registry program; to enhance measure and accuracy, reliability and verifiability --  
36 you're going to be hearing those words over and over and over again; and to ensure that there is an  
37 individual that register reductions are not penalized for future climate policy; and to give transferable  
38 credit to companies that show real reduction.

39 Further, he directed the Secretary of Agriculture with their partner agencies to develop  
40 accounting rules and guidelines for carbon sequestration projects. All of these three issues are going to  
41 be discussed today and tomorrow, and at the other three workshops - -

42 I want to digress for just a brief second in case there are folks in the room who don't  
43 know about 1605(b), we do have in your packet a layout of the different reporting components of the  
44 current 1605(b) program. This might be useful to you. You can also always visit the EIA website, EIA  
45 is the Energy Information Administration, part of DOE who manage the greenhouse gas registry. I  
46 believe they also have a table out front and there's a few publications there. But the registry  
47 was created by the Energy Policy Act of 1992. Again, it's managed by the EIA who records voluntary  
48 measures to reduce, avoid or sequester greenhouse gases. It is a registry of emissions and emission  
49 reductions. During the year 2000, the most recent data set that we have, a total of 222 US companies and  
50 other organizations filed reports. We already acknowledge that the reporting guidelines are currently

1 quite flexible as they were designed to encourage participation. Our new charge is going to require us to  
2 take a look at the guidelines to make sure that they meet the directives of the President.

3 What did we do when we first heard that the President gave us this directive. We set a  
4 goal of January 2004 to have the new guidelines in place, and that means that reporters would be  
5 reporting on 2003 data. The first thing we did, we put together an interagency team coordination process  
6 which includes many of our partner agencies, the Department of Commerce, the Environmental  
7 Protection Agency, the Department of Agriculture, DOE, EIA, and others including the State Department  
8 and CDQ.

9 There is a website -- I'll give you that in just a minute. Many people have visited it  
10 numerous times over the last several months either to provide us with comments or to download some of  
11 the information.

12 We issued a Notice of Inquiry in May of 2002 and got over 60 sets of very substantive  
13 comments on what we ought to do to revise the guidelines consistent with the President's directives. In  
14 July of this year four agencies represented here today, Secretary Evans, Administrator Rippen, Secretary  
15 Bodman and Secretary Abraham sent a letter to President Bush identifying ten key recommendations that  
16 should guide the process forward on revising 1605(b). Those recommendations are on the website, and  
17 they are also referenced in the background papers that you all have received. If you haven't received  
18 them, there are copies out on the table.

19 We have met continuously with stakeholders since May of this year. We are hoping  
20 these four workshops and there will be USDA meetings this year and next year as well, to develop the  
21 guidelines that they are required to develop. So there's an ongoing -- in order to make sure we understand  
22 what is of concern to you and to do our best to incorporate that as we move forward.

23 What's going to happen after the workshops? In the Federal Register notice that went out  
24 a few months ago announcing these workshops, we indicated a December 20 deadline for submitting  
25 written comments after the workshops. We are extending that deadline indefinitely. If you want to  
26 provide written comments to the Department of Energy on the workshops or on other issues we don't pick  
27 up at the workshops, our webpage and our registry address are open for business and will be open for  
28 business until this process is complete.

29 What we expect to happen, in early January is the DOE will start drafting the revised  
30 guidelines. By spring we will have a proposal which will go out for a public comment period. We will  
31 then take comments for a 30 or 60 day public comment period and start revising the guidelines in the  
32 summer and fall. All during spring, summer, and fall the Energy Information Administration will be  
33 required to prepare and review new reporting forms which will also go through a comment period. So  
34 that work can happen simultaneously while we're revising the guidelines. And finally, in January of 04  
35 we will issue the new guidelines and it does support 2003 data.

36 We recognize that this is a very ambitious and accelerated schedule, and we know that  
37 these are very complicated issues as all the panelists mentioned. The process will likely require  
38 additional meetings with stakeholders, but we all need to get together in groups like this or not we don't  
39 know, but we certainly anticipate meetings with many of you in smaller groups to iron out some of the  
40 more tricky details of revising these guidelines, so I would expect that will continue well into 2003.

41 We recognize, as some of the panelists said, we're not trying to attain perfection here.  
42 We are trying to show significant improvements to the registry, which is what the President asked us to  
43 do, and I think that we'll be able to do that with your help.

44 Many of you have commented on our agenda for the next two days, and we are trying to  
45 put an agenda together that is really reflective of the kinds of comments we got from you during the  
46 Notice of Inquiry period, and build on the four Agency letter and the ten recommendations that were in  
47 the letter.

48 Our topics are really centered around the question of how. How to substantially improve  
49 -- the President's words -- the registry and protect and provide transferable credits for emissions  
50 reductions? So again, it's a how to question. It's going to be steeped in technical issues and the

methodology issues. So we have four general sessions that will be coming up over the next two days. The one David will be pleased to see is on emissions reporting, improving the accuracy, reliability and verifiability of emissions reporting. The second session goes into a discussion about the -- issue of emission reduction. How do we characterize those and how to we measure those. It's likely to be a source of more differences across the different kinds of industries and stakeholders that we have represented here.

Tomorrow we want to be discussing verification issues. How do we verify the emissions and the reductions? And finally we want to talk about managing the registry. What we do when you register those emissions and register those reductions? How do we manage what's in the registry?

You will be hearing several cross cutting themes over the next couple days, and these aren't things that we made up. These are things that you reiterated to us and that we heard in the Notice of Inquiry comments, and we think that are important to constantly roll around as we work on these more difficult issues, as we know we'll have big differences of opinion.

This is a voluntary program. Many of you have recommended that there be legislation in order to create a mandatory program. It's not a mandatory program. It's a voluntary program. Nevertheless, we have guidelines to assure credibility. Almost every one of our panelists mentioned that word credibility. And that's key to what we're doing here. We need to move the registry into a situation so that it is credible by those that are using it to register their tons, register their emissions, as well as those that are not, in order to establish that we have a program that is a credible repository of greenhouse gas emission reductions for those who are voluntarily taking part in this effort.

Secondly, we need to balance rigor with practicality. This was a common theme as well. We don't want to be so striving for perfection that we lose sight of the fact that if this isn't practical and cost effective for our reporters, we're not likely to have very many reporters. So we want it practical, and at the same time be rigorous.

And finally, as I believe many of our panelists mentioned, we want to build on existing programs and protocols. As Sam Bodman said, there's lots of work that has been done since the early 90's when 1605(b) was first established. We would be remiss if we didn't take into consideration domestic and international efforts to improve not only the technical capability of measuring emissions, but protocols and learning how we better account for emissions and emission reductions.

Before I close and turn it over to Doug Brookman, I want to mention that we do have these two webpages. The web address that you can send in your comments, and another is our website where we have all kinds of information about these workshops and related information that you can download to help you out.

I want to introduce some of the key players who have worked with us on these workshops, bearing in mind that we have many federal folks peppered throughout the audience, and I'll get them to raise their hand in a minute.

I first would like to introduce from the Council of Environmental Quality, Phil Cooney. Phil, if you are here, if you can raise your hand. We have representatives from the Environmental Protection Agency, Reed Harvey and Cynthia Cummins, if you will please raise your hand -- Cynthia -- there you are, thank you. From the Department of Agriculture, Bill Hohenstein and Jim Hrubovcak, and from the Department of Energy, Energy Information Administration, Paul McArdle; and from DOE's office of Public International Affairs, Arthur Rypinski, Mark Friedrichs, of course myself, Margot Anderson.

Will all the other feds who are here representing their agencies please raise their hands so we know where you are. All of us are here to listen. All of us are here to assist you, if you need information, whether it's technical information or statistical information, that's what we're here for. So don't hesitate to pull us aside in the lobby and ask us questions if you need information and we will try to get it to you.

And on that note, I'm ready to turn it over to Doug Brookman, and I'm very much looking forward to the next couple of days. We've been working on this for some time and we're pleased to



1 finally be at this point and we're very pleased to see so many faces that we've been working with over the  
2 past few months. Thank you very much.

3 FACILITATOR BROOKMAN: Thank you. I'll be very brief. My personal objective  
4 for these two days is to get as much detailed, substantive comment as possible and still get through all the  
5 subjects listed. So we can have our own laugh at this point, I'm sure. How many of you have taken a  
6 peek at the agenda already? Thank you. We're just going to have to do the best we can. Let me do  
7 another very brief survey. How many of you in this room have what I call detailed, working knowledge  
8 or experience with these kinds of registry programs? Raise your hands. Wow. That's better than  
9 [inadible] How many of you consider yourselves fairly new to this enterprise of participating in  
10 registries? So that's the other half. So none of you don't know where you are. None of you are in the  
11 middle. Okay.

12 I was kind of hoping as we go along here today that -- we've got a format for this  
13 discussion which are key questions to seed the discussion, and it follows the annotated agenda, there's  
14 about a 12 or 15 page draft, detail content-specific draft, that tracks these [inaudible] agenda, and we're  
15 going to be flashing questions up on the screen as a way of trying to cluster and concentrate the  
16 discussion.

17 I'm going to be trying, in the exchange that follows, to gather a representation or even  
18 summary statements on the views. Obviously, I'm not going to recover all of everybody's views here, but  
19 I hope to capture the bulk of it as succinctly as possible in a short span of time, and then I'm going to be  
20 moving on. I'm going to be going as fast as I can to cover as much content as at all possible within a  
21 short span of time.

22 I'm going to ask for your help to make that happen. We need a brief representation of the  
23 key views. If you've got a key view that's not being listed here, you need to raise your hand and get into  
24 this conversation, and do it quickly and succinctly and then we're going to move on, because there's a lot  
25 to cover. That's the general plan.

26 Does everybody have a copy of the agenda in your packet? I'd like you to take a look at  
27 it, if you please. We'll do this briefly. We've already gone through the first two elements and so now  
28 we're on the 9:30 schedule segment which I will end here shortly.

29 We'll kick off the morning by what I hope will be a detailed discussion on emission  
30 reporting, and you can see there in 1, 2, and 3, the kind of content clusters that I hope you will kind of  
31 calibrate your comments around. We're going to take a break mid-morning, probably 10:45-ish. We'll  
32 take lunch right about 12:30 or 1:00. Perhaps the largest challenge we have as a group is to get through  
33 this morning's segment and actually end by lunch. I ask your cooperation to make that possible.

34 We'll give you a full hour for lunch. We'll give you detailed instructions on where you  
35 can eat nearby. There are too many people, I think, to accommodate at the restaurant we have here, so  
36 we're going to have to be clever to get out and eat and get back in that hour.

37 We'll resume after lunch with a discussion on emissions reduction and sequestration,  
38 both characterizing and measuring. We'll have a bathroom and coffee break about three. You can see on  
39 your agenda, in the four o'clock to 5:30 time frame, we have defined breakout sessions. We do have a  
40 little bit of flexibility in those breakout sessions. If this turns out that we've got just way too much to  
41 cover in the afternoon session, we can maybe move those breakout sessions to first thing tomorrow  
42 morning. I'd like as much as possible to really stay focused on the task here to get through all this. So  
43 we'll just make that decision on the fly as we go.

44 We do intend to adjourn today at 5:30, as a matter of both practicality and consideration,  
45 I do intend to adjourn by about 5:30.

46 That's the general plan. Questions or comments before we get into more specifics? Does  
47 anybody have a specific issue that you don't see finding a place in this agenda somewhere? I see no one.  
48 Okay.

49 Finally, I left out here for your consideration in following whatever rules for this public  
50 workshop. I'm going to ask that you speak one at a time. I'll be recognizing people to speak. And I'm

going to ask you to say your name for the record. This tape will be -- this meeting will be taped, and there will be a written transcript as well, so both forms will be available following the workshop.

And then I ask also that you be particularly careful to be concise and also share the air time. If you start talking and go on for more than about a minute and a half, I'm going to start getting nervous up here, and you're going to start to lose your audience out there. And I'm also going to ask you to limit the statements that you wish to read into the record. If you have a written statement that is more than a paragraph and a half, I'm going to ask that you summarize it and hand it to me and we'll insert it into the record in its written form. We have the ability to do that. I ask for your consideration on that.

Let's keep the focus here. Turn off your cell phones. If you have to take your cell phone, please take it out of the room. If you have to have a sidebar conversation with someone at the table, which I can certainly understand, if it's going to be more than about 30 seconds, please take that out of the room. We'll understand that people moving in and out of the room are a matter of personal convenience as the day moves on.

I'm going to be cuing people to speak. I'm going to recognize this person, and this person, and this person to the extent possible by name. If you can turn your table tents towards me so that I can read them, that'll help me. I'm also going to be wanting to encourage follow on comments as that's the way you seed the discussion. If I drop you out of a queue, don't let me get away with it. Start waving your hands, do something. Inevitably I will, there's a lot going on up here.

So I hope that these norms work for you. I ask your consideration to make it possible for them to do the work. Anything else that we need to cover at the outset? I'm very eager to launch into the conversation. I see none, okay, let's do the first slide.

Once again, these slides are truncated versions of the annotated agenda. Put up the second one. So first, we'll start off with emissions reporting and you can see these questions, this cluster of questions which perhaps you might be able to address as a cluster. What is an entity? How do encourage entity-wide reporting? Corporate and institutional barriers [inaudible] share control and governance involved? Ways of defining corporate responsibility, flexibility in defining non -- Non-US emissions?

So I'll just like to throw it open, you can start raising your hands and we'll begin. Who wants to start? Yes, please. Would you just say your name for the record. You need to push the button on on the mike and turn it off when you're done.

MR. SKERNOLIS: Ed Skernolis from --

FACILITATOR BROOKMAN: You have to get a little bit closer.

MR. SKERNOLIS: Ed Skernolis from Waste Management. I have a question. We're only talking about reduction reporting entity-wide --

FACILITATOR BROOKMAN: Did you hear that? We had a little bit of a hard time hearing that.

MR. FRIEDRICHS: Mark Friedrichs. We're talking about emissions reporting -- that's the focus of this session. We hope to focus on emission reductions in the afternoon. Right now, we want to start on all the emission reporting related issues. It's obviously the first step in identifying emission reductions.

MR. SKERNOLIS: Then if I could make a follow up comment in that context. One of the concerns we expressed in our comments had to do with in the way how you view the success of -- I heard one standard was you get the accounting right to be successful. I would offer a second one, that you get participation it would be successful. It seems to me that one of the issues that you have to look at in terms of incentives for participation is the degree of difficulty in reporting entity-wide versus sub-entity project emissions. And if the only criteria for participation is it must first be an entity-wide emission reporting, I think you're going to substantially reduce the participation.

FACILITATOR BROOKMAN: Okay, thank you. Yes, please. And your name for the record.

MR. DONIGER: David Doniger, NRDC. I think that gets to the central point. When

1 you look at the 1605(b), you find apart from electric generators who are required to report to EPA under  
2 the Clean Air Act, only four percent of the emissions in the country are represented by the companies  
3 that volunteered to report on an entity-wide basis. It's a problem in the voluntary program that in order to  
4 have rigor, it has to have some substance in it. And then people say, well, that discourages my  
5 participation.

6 A system which has as its goal maximizing participation is not going to end up rigorous  
7 or credible. And if credibility is our goal, then you have to have those standards. If the problem is that  
8 there are companies that won't participate, well, so be it. We need to see what the willingness is for  
9 companies to come forward and work on their emissions. It's the fundamental building block of knowing  
10 anything about the struggle that's fundamental to any hopes anyone might have of getting baseline -- of  
11 getting something that's really transferable in a later enactment. So --

12 FACILITATOR BROOKMAN: In that balancing point of rigor and practicality, there's  
13 a certain amount of rigor that's a necessity.

14 MR. DONIGER: My point was that there's not a balance.

15 FACILITATOR BROOKMAN: Okay.

16 MS. EATON: Rebecca Eaton, World Wildlife Fund. I want to just comment on this  
17 topic also, especially with [inaudible] point from a leader initiative. It was mentioned earlier  
18 WRWBCFT protocol as a good place to learn from. That's known as the J(ph) protocol, that can be  
19 found at J(ph) protocol.org. That's voluntary. It's the chief international consensus and expectance of  
20 those principles, both from industry and government. And a key part of that is corporate-wide, so I just  
21 wanted to say that there [inaudible] is there. Companies have accepted that and that's considered very  
22 credible.

23 FACILITATOR BROOKMAN: That certainly is a part of those other precedents --  
24 other programs that are working well. Other comments on how to encourage entity-wide reporting and  
25 also about how you would establish corporate --

26 MR. ALARCON: My name is Carlos Alarcon, and I'm with CO2 Financial. I'm going to  
27 just have to drill down to the basics here -- the basic criteria for all this is going to be what's in it for me.  
28 When these folks arrive at certain set of standards for reporting, there is going to have to be a derived  
29 value for corporations to participate. So, beginning is what are we offering? And that answers the  
30 question, what's in it for me? And then am I willing to participate under the rigors that have been  
31 advanced? So, I'm throwing that out there. I'm saying these corporations -- they will have to meet with  
32 some standard.

33 FACILITATOR BROOKMAN: Thank you. And I noted this morning that our panel  
34 thought that there was quite a bit of potential for corporations to step forward, seeing already that there  
35 was something in it for them. Yes, your name, please.

36 MS. WILSON: Cindy Wilson, Catalytics, Inc. I think that what's in it for the companies  
37 is proven in the market today where a ton of CO<sub>2</sub> can go from anywhere from a dollar [inaudible], and  
38 the bottom line is what those differences is has a lot to do with quality, and data is part of the quality.

39 FACILITATOR BROOKMAN: Which is why we're talking in this workshop  
40 specifically about the detail measurement issue, we're really focusing there. So let's turn to that. How do  
41 you encourage entity-wide reporting? I guess the present 1605(b) and people that have worked in  
42 preparation for this, the current 1605(b) program the entity -- the definition of entity is broad, is that not  
43 correct? And also there is -- Arthur, you want to address that?

44 MR. RYPINSKI: The definition of entity in the existing program is a legal person, and  
45 in practice that means most of the corporations. In a couple instances it's individual facilities within  
46 corporations. It also means -- body, government agency, or in most cases, the public, or municipal utility.  
47 And private or voluntary organizations --

48 FACILITATOR BROOKMAN: Thank you. Yes, please, Bill.

49 MR. FINE: Bill Fang with the Edison Electric Institute, also representing six other  
50 power center trade groups which I can state for the record if you need them -- seven organizations.

1 Several comments. First of all, I think there may have been an implicit mistaken  
2 assumption that the only emphasis here on this segment of the discussion is on entity-wide reporting. I  
3 don't think that that is true, and a couple of statements have been made which I think are incorrect in that  
4 regard. The statute specifically talks about plants and facilities -- that's 1605(b) under the Energy Policy  
5 Act, you cannot rule out reporting by plant and facilities.

6 Secondly, certainly for the electric utility industry, it doesn't make sense to talk about  
7 solely the emissions from all parts of the corporate entity. The concern for our industry, which I think  
8 most people would agree on, and I think there is consensus on this, is the CO<sub>2</sub> emissions from power  
9 plants. There is a great deal of effort and cost associated with gathering emissions for other, much less  
10 important emissions, such as TND or fleet vehicles, for these facilities and so forth. So the issues for our  
11 industry is how to gather the information for the most important part of what -- in the annotated agenda is  
12 called the lines of business activity. And that's what this focus should be on, is the lines of business  
13 activity, and of course, program participants should be given some flexibility to define their own values.

14 FACILITATOR BROOKMAN: Okay. And do you have any additional things to say  
15 about how one provides the flexibility in reporting.

16 MR. FANG: Well, I think you just have to allow some flexibility in the reporting for the  
17 reporter to indicate what their boundaries are. I think the current guidelines talk about common  
18 ownership and control. That could certainly be one standard, and here, DOE in this material suggests  
19 that lines of business activity or principal lines of business activity can be another standard.

20 FACILITATOR BROOKMAN: Okay. Yes, please. Your name.

21 MS. LEV-ON: I'm Miriam Lev-on. I'm representing the American Petroleum Institute.  
22 I'd like to make a couple of points. Most of them are based on some written comments that the API has  
23 provided to the DOE, and also on the practice that API has established through the development of the  
24 API Compendium on greenhouse gas emission estimation methodology.

25 So a couple of things. First of all, we would like to encourage the remaining testimony  
26 in as far as allowing either entity-wide reporting or individual projects or line of business reporting,  
27 based on corporate policies because this is a voluntary condition for corporations to participate in.

28 The other item would be that in the API Compendium, in the discussion about some of  
29 the reporting -- we had a full discussion there on two potential ways that corporations might choose to  
30 report, and one is 100 percent as operated, and the other one is on equity share. And the main thing  
31 would be to allow this flexibility and also to allow for good practice -- people just telling what it is that  
32 they are reporting on -- 100 percent as they operate, or is it on an equity share. As long as it's  
33 transparent, then I think it would be good to maintain this flexibility in the new registry. Thank you.

34 FACILITATOR BROOKMAN: I'm wondering about the other registries that are in  
35 place now -- how they're operating now, like for example, the WRI. Miriam, as the day goes on, I may be  
36 putting you on the spot to describe how you're handling those issues.

37 MS. LEV-ON: The greenhouse gas protocol is not a registry, it's just an accounting  
38 reporting standard.

39 FACILITATOR BROOKMAN: Thank you. Are there other comments on this slide.  
40 Yes. I'm not sure that you can see them.

41 MR. LEWIS: Marlow Lewis, CEI. It seems to me that if you're just discussing  
42 reporting, the standards can be as flexible as they currently are and people should be free to report a  
43 project [inaudible] reduction or an entity-wide, but if they're talking about reporting in the context of  
44 handing out credits, then obviously you can't give them credit for a project reduction, because that allows  
45 those people to cherry-pick and incites emission leakage. So it depends on the purpose of the reporting.  
46 If the reporter is seeking a credit, then he better well provide company-wide data, otherwise, he might be  
47 hiding something.

48 FACILITATOR BROOKMAN: And of course we'll be dealing about the details with  
49 respect to reductions in the afternoon, but that comment, I think, is useful. Another comment -- you're  
50 next, sir.

1 MR. CASHIN: I'm Mike Cashin with Minnesota Power. And I guess it's been our  
2 experience that project level reporting is manageable and could be employed in the context of [inaudible]  
3 characterization. I think the complexity of reconciling an organization level balance is an unnecessary  
4 burden on the process.

5 FACILITATOR BROOKMAN: I saw you first, and then Janet.

6 MS. KOZAK: My name is Lee Anne Kozak, and I'm with Southern Company. I have  
7 just one quick point on the details of your first bullet up there in terms of voluntary various ways to  
8 address the issue of joint ownership of facilities. One option that I don't see up there that I have not seen  
9 in any of the materials is reporting on the basis of reduction share, at least in terms of electric generating  
10 facilities in the case of joint ownership, where various partners have rights to a different -- to a particular  
11 share of the production. I think that is a valid and viable basis of reporting and should be allowed.

12 FACILITATOR BROOKMAN: Thank you. Janet.

13 MS. RANGANATHAN: I'd like to speak to --

14 FACILITATOR BROOKMAN: Your name, Janet, please.

15 MS. RANGANATHAN: Janet Ranganathan, the World Oceans Resource Institute. I'd  
16 like to speak to the point of entity versus project level accounting. I'd like to make two points. One  
17 relating to the business case for doing entity reporting as opposed to project reporting, and then secondly,  
18 to the external, the outsider's view. Climate change is a strategic issue for companies. It's going to  
19 present a number of opportunities and risks for companies. In managing those risks and opportunities is  
20 important for companies to have the full range of information to make those decisions. And from the  
21 outside point of view, just as with for natural reporting, it would be unacceptable for companies to just  
22 report on selected profitable business lines. I think it's important to the external world to look at the full  
23 range of risk and opportunities to a company and understand what they're doing overall, not just in one or  
24 two small areas.

25 FACILITATOR BROOKMAN: Thank you. Steven.

26 MR. FOTIS: Stephen Fotis, talking on behalf of a large public power council. I just  
27 want to reiterate, sort of, our basic agreement with what Bill Fang expressed and emphasize, at least as  
28 relates to government entities, that there are different lines which may or may not make sense to include  
29 it in order to insure the credibility of what's being reported. And I've heard credibility as another criteria  
30 I just want to emphasize, that ultimately, what we want to have is data that is credible. For instance, the  
31 power generation on the public power side there may be lines of business such as waste water treatment  
32 and things of that nature, which are relevant and we need to report, but for whatever reasons, we choose  
33 not to, and I think that to have a flexible program that allows entities such as a public power generating  
34 unit to report CO<sub>2</sub> emissions and not have to be so comprehensive to include the emissions from  
35 wastewater treatment, or even some of the other gases, since CO<sub>2</sub> is the focus and so long as it's clear and  
36 credible and captures all the units -- we're not cherry picking -- I think that really helps to encourage any  
37 public power entity.

38 FACILITATOR BROOKMAN: Thank you. Greg.

39 MR. McCALL: Greg McCall, Hydroelectric Power. I just want to reiterate a couple  
40 points on the flexibility of the reporting system is very important. I wanted to, if possible, to submit  
41 drawings?

42 FACILITATOR BROOKMAN: Yes, it is.

43 MR. McCALL: Okay, from the Meridian Institute, in our breakout session, we talked  
44 about how to go about reporting with as much flexibility as possible in the -- Hydroelectric Power  
45 submitted to that process and I'd like to submit it here just as a suggestion. It's a suggestion of how you  
46 might lay out a system that would encourage entity-wide reporting, but provide the flexibility for project  
47 by project and other things like that.

48 I also want to mention about Lee Anne Kozak from Southern Company and her comment  
49 about production-based distribution. We certainly do that with emission allowances in energy taken  
50 from our coal units is how we distribute that and I would encourage that.

1 FACILITATOR BROOKMAN: Thank you. I see one more comment, but I want to ask  
2 about non US emissions too.

3 MR. TOWNSEND: Bill Townsend, with Blue Source [inaudible] discuss the issue of  
4 [inaudible] project. It looks like I have to make a recommendation on how to solve that. The issue is one  
5 of level accounting -- I think the issue is one of level accounting. The issue is one of whether projects  
6 encourages versus not encourage the reporting. And second, I don't know if it's meaningful. The issue  
7 therefore is level accounting. I believe that can be resolved if the characteristics of project emission  
8 restrict its use in an entity reporting. So if you're going to report projects, and you have equity position  
9 and control or whatever the terms would be, you would be restricted from using that in your entity  
10 reporting in terms of your legal consequences, your transactional consequences, your transparency  
11 issues. So those -- that's really in a nutshell. The characteristic of the project reporting would  
12 specifically restrict your use of that and that would be transparent, full knowledge.

13 FACILITATOR BROOKMAN: Thank you. You're first, yes.

14 MR. KLEIN: I'm Dan Klein. My company is Twenty-First Strategies. My comment is  
15 on the encouraging entity-wide reporting, and in particular a caution not to load on too many burdens and  
16 costs. There will be a session tomorrow on the verification and I'm sure third party verification will  
17 come up and it's quite possible that third party verification involves tens of thousands of dollars and  
18 more. If you're a small company, and you're emissions are small, the costs per ton for such verification  
19 can be quite high and itself become a barrier for entry into a voluntary participation.

20 FACILITATOR BROOKMAN: Let me ask -- any comments on this final bullet on this  
21 slide, non-US emissions? Your name, please.

22 MR. JONES: Russell Jones, American Petroleum Institute. We support the President's  
23 goals for emission reduction for the US as a whole. And that puts focus on US emission reduction. At  
24 the same time a lot of companies are world-wide operators -- so we would support the reporting of both  
25 to make sure that they do.

26 FACILITATOR BROOKMAN: Okay, I see. Anything else on non-US?

27 MR. STREITER: Yes, Bob Streiter with the Aluminum Association. We are involved  
28 heavily in international level, developing a reporting protocol for the aluminum industry, and we are in  
29 the process of adopting a WRI protocol that we feel is very flexible and allows a lot of tailoring to the  
30 individual industry, so we do think that there needs to be transparency as is emphasized in WRI protocol  
31 for outlining your reporting inventory. We are aggressively looking at an equity-based process but  
32 believe it could be done on an operator-based program as long as it's transparent and doesn't show  
33 duplicate reporting.

34 One of the issues that came up at our equity share approach that we decided to go  
35 forward with is the problem of limited partners, availability of data, and how does that get reported. So  
36 there needs to be some consideration on limited partners not being able to get the necessary data for the  
37 reporting and does the controlling partner or does miscellaneous percentages or how does that --

38 FACILITATOR BROOKMAN: Do you have a perspective on that? Or a  
39 recommendation?

40 MR. STREITER: Well, we've decided that for our members, they're going to be  
41 demanding the data from the -- if they're limited partners -- from the controlling interests so that they can  
42 report --

43 FACILITATOR BROOKMAN: Which reinforces your point about transparency.  
44 Steven Fodis.

45 MR. FODIS: My comment really goes to if there is an entity-wide reporting  
46 requirement, that that would only apply to the US facilities. The international would be optional.

47 FACILITATOR BROOKMAN: I thought -- the four agency letter did it not say  
48 encourage entity-wide reporting? As I recall, I think it did. Other comments that go specifically to that?  
49 Yes, please.

50 MR. DONIGER: David Doniger, just on the US emissions -- I think the primary focus

1 that we would like to see is on a US inventory built up from the entities in the US. There's a "sauce for  
2 the goose and sauce for the gander" problem here too though. If, in the reductions side is accounting for  
3 out of the country reductions, it needs to account for out of the country emissions as well in order to  
4 know that they're not cherry-picked from overseas operations of companies or overseas partners of  
5 companies.

6 FACILITATOR BROOKMAN: And would it be okay with you if they were both  
7 supported, but they were -- but they were separated?

8 MR. DONIGER: I think it's important to separate them, yes. You need to know -- if you  
9 want to have a relationship between the accounting system and the national inventory, you need to have  
10 some identification of which emissions reported to the system are coming from entities' domestic  
11 operations.

12 FACILITATOR BROOKMAN: Okay, other -- yes, please, your name.

13 MR. LYON: Tom Lyon, Resources for the Future. I just wanted to underline Marlow  
14 Lewis' comment before which is there's a great difference between reporting just for the fun of it, and  
15 reporting for credits. And if we're going to do reporting for credits, failing to incorporate international  
16 emissions could lead to very obvious things that count as reductions which really represent only moving  
17 a plant from the US to Mexico, which would have no real impact, but which could be credited if you  
18 didn't include all international productions.

19 FACILITATOR BROOKMAN: I want us to be clear -- I think all of us heard this  
20 morning the thrust of the President's direction to the agencies, which was to make it possible for  
21 transferable credits. Right? Irrespective of the legal authority question which we'll address at some point  
22 today or tomorrow. And so I think with that as a possibility at least, in mind, is what we're talking about  
23 here. Okay, other comments on this slide? Janet.

24 MS. RANGANATHAN: Janet Ranganathan, World Oceans Resource Institute.

25 FACILITATOR BROOKMAN: Get a little closer, will you? Thank you.

26 MS. RANGANATHAN: The greenhouse gas protocol initiative addressed the issue of  
27 organizational boundaries in terms of how do you allocate emissions from entities where there is shared  
28 ownerships. This is an important issue in many greenhouse gas intensive sectors, and its goal was really  
29 to help companies develop an inventory that could be used for multiple purposes. Registries is one of  
30 those, emissions trading in Europe certainly is another, regulatory reporting, and participation in  
31 voluntary programs.

32 We offered and recommended that companies account for their emissions in two ways.  
33 Firstly, based on the financial control approach, where they have financial control of the entity, they will  
34 report 100 percent of the emissions. And the second approach was on the basis of entity-share, where it  
35 would be based -- it would be in proportion to the equity share or economic interest in the entity. The  
36 reason for recommending both is in recognition, really, of the fact that the companies will want to use the  
37 information over time for many different purposes, so locking themselves into one might create problems  
38 down the road. The financial control is certainly the approach that's being used more in Europe. It's used  
39 by the UK Emissions Trading Scheme. It's used -- it's partly proposed by the European Union 12th  
40 directive on trading. The equity share reflects more the commercial reality, and the argument by some  
41 that if you have an economic interest and derive revenues from the entity, you should really also take  
42 responsibility for the emissions. So they both have a place.

43 FACILITATOR BROOKMAN: And you've thought that those two together are  
44 encompassing enough for companies' constituents to deal with?

45 MS. RANGANATHAN: Yes.

46 FACILITATOR BROOKMAN: Okay. Thank you. I think we can go to the next slide.  
47 Final comments for this slide before we go on? Did we cover this one adequately? Give me a sign,  
48 folks. We covered it adequately. No we haven't. What else do we need to cover? We covered it  
49 adequately.

50 Operational boundaries and related issues. Direct versus indirect emissions. We had a

transparency, did we not, that talks about this? The E.I.A. and the Department has invited you Mark, do you want to just talk about this -- a few slides just to illustrate some of these points.

MR. FRIEDRICHS: Obviously there are several different issues we need to talk about -- straight emissions, which I think there's general agreement about. We then have a category of emissions which you call indirect. The most significant part of that category is electricity use by industry, by other users. There are a bunch of other types of indirect use which some have advocated also be included in our definition of emissions. We want to hear views on how those different types of indirect emissions might be included.

There are a variety of other kind of emissions, some you've already heard about, other gases, small sources within larger companies, fugitive emissions. We'd like to hear a little bit about how those here [inaudible] guidelines that treat those types of emissions.

FACILITATOR BROOKMAN: Okay, thank you. So I'm going then to this next slide, which features direct and indirect emissions. And you see the specific questions to gear up this discussion -- should users report electricity and steam purchases as indirect emissions? Other indirect emissions associated with materials used -- business travel, employee commuting, use of manufactured products and -- I'm going to be leaving these slides in the record so we'll know what we're about to discuss. Okay. I know you all can read them.

First comment on this next slide. Yes, I saw you first, and then you. Give us your name for the record.

MR. LEWIS: Marlow Lewis with CEI again. It seems to me, once again, the big distinction here is whether you're talking about reporting for the purposes of getting an "attaboy" or reporting for the purposes of getting a transferable credit. If you're just receiving some kind of public recognition for good deeds, it really doesn't matter if there's no accounting by say the utility that produces these emissions because it doesn't produce as much electric power as it might otherwise would, and the manufacturer that just built a combined heat and power system that reduces demand for the electricity. But if you're awarding credits, then it seems to me it's got to be the company that made the investment that caused the reduction that reports an emission that is credible.

FACILITATOR BROOKMAN: Thank you. I saw somebody -- yes.

MR. SKERNOLIS: Ed Skernolis with Waste Management. A couple of points. One is I think this slide raises some of the issues that were raised in the previous slide about entity-wide reporting, and about both how it works as an incentive as well as how it works in terms of accuracy. One of the concerns I mentioned earlier with entity-wide reporting was incentives, but that incentive is largely built around cost in many cases, as was raised by some of the other speakers. In this slide when you start talking about instituting entity wide reporting to include indirect related emissions, you now start getting into more and more arcane estimation methods. So I think you're starting to talk about the loss of quality of data, the more abstract emission reporting becomes.

As a practical example, we can meter in our facilities, to the cubic foot, the amount of methane we use in energy recovery projects. You start going outside of that line of business and start talking about employee travel, et cetera, the quality of data is going to sufficiently decline. And if we're talking about using that for valuing a credit in the marketplace, that will be a very strange marketplace. And I think we have to keep our eye on the ball if we're talking about transferable credits -- what I would call a blue chip credit versus something that's going to be a lot fuzzier than that.

FACILITATOR BROOKMAN: And is fuzzy -- those places where indirect emissions are real fuzzy, are you suggesting because they're fuzzy or because they're hard to determine, they're not worth trying to account for?

MR. SKERNOLIS: I think inevitably, given the scope of indirect, which is an accounting for everything you do --

FACILITATOR BROOKMAN: It is.

MR. SKERNOLIS: -- is going to get -- some of the accounting has to get pretty fuzzy. I mean the estimation methods are going to be fairly arcane to begin with, and there's going to be a real



question about the quality of those estimations, the quality of the data produced by those estimation methods.

FACILITATOR BROOKMAN: I'm going to take a follow up comment here, and then there.

MR. HOLLOMON: Brad Hollomon, Pacific Northwest National Laboratory. Some of the experience that I bring to this is working with the International [inaudible] program over the last several years, which many projects were proposed, 50-some of them were finally approved. I think -- I entered into that process with a certain amount of optimism about being able to do indirect estimates, particularly estimates of electricity, offsets of conservation. I think at the end of it I probably have despaired pretty much of being able to do that, that it is -- I think I would say for purposes of argument, that it isn't feasible to do this the way that would create an [inaudible] type of analysis.

As an example, one of the things that I would suggest is somebody turn the lights off in this room and estimate for us how much CO<sub>2</sub> is actually being offset by doing that. I think when you get into that process, it's extremely complicated.

FACILITATOR BROOKMAN: So you support not only his notion of it being fuzzy and difficult, but also there being, you know, a blue chip grade and perhaps another -- okay.

MR. HOLLOMON: If you're interested in a blue chip grade, yes.

FACILITATOR BROOKMAN: Okay. I'm going to go to this gentleman, and then to you and you -- okay. If we can be as -- we're doing very well in terms of being focused and succinct. I appreciate it and hope we keep on with that trend. You're next.

MR. BARBOUR: Thank you. My name is Wiley Barbour. I work with the Environmental Resources Trust, and for the last five years we have actually owned and operated a 1605(b) registry, so I have some familiarity with these issues. To be very specific, on the question of direct and indirect, I think this is one of the key issues that we're going to be wrestling with these next two days.

I would propose that we adopt a mind set that says let's report what we measure. When it comes to indirect emissions, we can measure kilowatts avoided. We can measure green kilowatts produced, and I would propose that we register kilowatts. When it comes to direct emissions we can measure CO<sub>2</sub>, we can measure methane or N<sub>2</sub>O or the other gases. We can report those. But to make a presumption on what's the appropriate factor to convert reductions in kilowatt usage to CO<sub>2</sub> requires a whole host of assumptions, and in fact, it requires a host of policy decisions which can be lost when they're all lumped together.

So I would propose, keep these separate and I think some of the folks here have mentioned the idea of perhaps a blue chip portion of the registry and that other parts -- that type of thinking was also emerging in the Meridien Institute's group on dealing with registry issues. And I think that ultimately that will be required, that there may be a very core set of emissions that are high quality, very, verifiable, measurable, and perhaps even subject or able to be transacted on in the open market for emission reductions, but not everything, and not all of the issues that we're dealing with here are --

FACILITATOR BROOKMAN: So there's no blanket statement about where it is possible to measure it, where it is possible to verify it, where it is possible to say what it is, that maybe there's benefit to doing that, and maybe that it marketable. You're next, and then this gentleman next to you.

MS. ZIMMERMAN: Kristin Zimmerman with General Motors. What I've been hearing over the past few minutes might be better described by a multi-tiered registry where the beginning level, counting about ten percent of the folks just getting started might want to take a chance at starting out with the image credit, where there's no intention to actually trade because they don't know what they have to begin with. And the next level of the registry might be folks that are interested in trading and they would use maybe the first level, maybe the yellow chip, not the blue chip. They want the quality and value. And then the ultimate is that blue chip, where you invest a lot in your verification and certification, and the standards used to qualify those credits. Kind of a multi-tier.

FACILITATOR BROOKMAN: Okay, thank you. You're next.

MS. JAMARAYAN: My name is Civi Jamarayan. I'm with the [inaudible] Public Service. And my comment today refers to the first two bullets you have up there. As an electric utility we buy power on a minute by minute and hour by hour basis. And there's no way that we can determine whether the power came from a nuclear power plant or a solar panel. So it's impossible to quantify emissions coming from those that are purchased.

FACILITATOR BROOKMAN: There was a paper that suggested that it might be possible to use some sort of averaging, you know, taking a factor that encompass the generation mix at certain times of the year, you know, that sort of thing.

MS. JAMARAYAN: Yes, but that is even going to be more problematic because are you going to calculate the emissions based upon a particular plant, or on an average of these plants a companies may have -- a company which sells the power, or whether it is going to be the same throughout the feeder you are selling it for because they are different.

FACILITATOR BROOKMAN: This gentleman's comment over here was that sometimes that's the case now where there are going to be sources of power that are labeled "green" for example that you would have that kind of information available for -- if that is your comment, is it not?

MR. BARBOUR: That's correct, what my comment was -- of course we can measure the kilowatt hours, the question is, how much CO<sub>2</sub> does that displace in the current grid.

FACILITATOR BROOKMAN: It's a policy question.

MR. BARBOUR: And really, is it avoiding future growth or is it causing an actual reduction in today's emissions?

MS. JAMARAYAN: That's exactly the problem we will face. You have to account for emissions associated with particular --

FACILITATOR BROOKMAN: I saw about five additional people who want to get in. I believe I saw you, but before I saw you I saw David, and then I saw you, and then I'm going to come back here. And then I'm going to reform the queue. I'll go to the back of the room. Okay, it's time to be as brief as possible. You're next. Right here.

MS. LEV-ON: Again, Miriam Lev-on on behalf of the American Petroleum Institute. The API Compendium provided distinctions between direct and indirect emissions. And recommends the flexibility for companies to consider reporting both the direct and indirect emissions, and particularly the indirect emissions as it refers to the sale of electricity and steam.

As a practical example, the next generation, which is a very energy-efficient methodology, initially can result in increase of emissions or operating emissions in a facility, but it's definitely much lower overall emissions if you take into account the avoided purchased electricity, or I should say more specifically, that there it would be less of an emission, than if you had to generate your own steam at the facility and then buy the electricity, and that would be one of the rationales for encouraging this consideration for reporting both the direct and indirect.

As a practical matter, the Compendium has wrestled with the issue of how to account for this indirect emissions, and the procedure that was landed on was to use the E.I.A. state average emission factor. It might not be the best, but for the purposes of just having a consistent application across the country, that was the recommendation. Thank you.

FACILITATOR BROOKMAN: I saw David first.

MR. DONIGER: I'm not sure this issue is properly placed in the agenda in the sense that the real subject of indirect, the real purpose of -- the real subject people are discussing with respect to direct and indirect emissions especially for electricity, is a question of who's going to get credit for reductions in indirect emissions, not who's going to be responsible for reporting the emissions that they -- If you have an emissions reporting system which is comprehensive, all emissions would be reported by their direct emitter, and for the purposes of getting a good handle on what's actually happening, that will do.

There are other purposes that one could have. One could have the purpose of encouraging downstream users to make the investments that would produce electricity used, for example.

1 And what Wiley suggested would be a reasonable way of keeping track of one's history over time of  
2 electricity consumption or green electricity production.

3 There would then come the question if any reward is to be given for that, from whence  
4 should it come? Should it be from within the cap or should it be from outside the cap. And that's the  
5 question I just lay out there, a more general one, for later.

6 FACILITATOR BROOKMAN: I'm going to go way to the back of the room. Yes. Find  
7 a microphone and push the button. Your name, please.

8 MS. BOURNE: Sandy Libby Bourne, North American Legislative Exchange Council,  
9 and I'll be simple and blunt. I think that second question on other indirect emissions. You don't have a  
10 federal agency large enough to verify and account for all of that data that you're talking about. If the  
11 President's goal is to reduce carbon intensity, then keep the process simple. Go after the direct things that  
12 we know are listed pollutants and keep it simple. You're creating an agency bigger than the IRS and you  
13 already have enough problems with that.

14 FACILITATOR BROOKMAN: The potential gain to try and to capture indirect and the  
15 scale and the complexity of it -- it completely outweighs, even those areas where indirect seems to be  
16 measurable, transparent enough, documentable, verifiable enough -- that are worth verifying -- it's not  
17 worth doing.

18 MS. BOURNE: Correct, because it's not worth the little tiny benefit you might --

19 FACILITATOR BROOKMAN: So now the three follow ons. You first, and then to you  
20 and to you and then we're going to move on from there. Yes you. Name for the record.

21 MR. CARTER: I'm Tom Carter with the Portland Cement Association. I've got a follow  
22 up to Kristin Zimmerman's comment which was so long ago that I've almost forgotten the topic.

23 FACILITATOR BROOKMAN: It was about tiers as I recall.

24 MR. CARTER: Yes. I would endorse her multi-tier approach and suggest a multi-tier --  
25 an accompanying multi-tier verification approach, sort of -- if you're looking for an accountable way as  
26 Margot calls it, then there's a very low standard --

27 FACILITATOR BROOKMAN: Different levels of rigor.

28 MR. CARTER: Right. The ultimate layer would be third party, independent third party  
29 verification. Something in between might be sort of self-verification, whether it be direct or audit --  
30 when you do your taxes.

31 FACILITATOR BROOKMAN: Thank you. Yes.

32 MR. CASHIN: Mike Cashin, Minnesota Power.

33 FACILITATOR BROOKMAN: You've got to be closer, Mike.

34 MR. CASHIN: A couple points. When it comes to electric supply, each region is  
35 resourced differently with what makes the best value -- the east versus the midwest. You run into the  
36 problem where an activity such as putting in a lift arm in terms of the emissions benefit varies  
37 significantly, depending on where you are in the country. Consequently trying to establish a single value  
38 is going to be a challenge.

39 There are also -- the dynamics of all the energy resource mix varies significantly with  
40 what's happening in the economy. You can have activity show a significant greenhouse gas benefit that's  
41 just an artifact of an economic downturn. Consequently, just trying to do a net balance and you wind up  
42 really capturing the story of balance and offsets of greenhouse gas emissions.

43 FACILITATOR BROOKMAN: Thank you. You, sir, and then I'm moving back this  
44 way.

45 MR. STEADMAN: My name's Gene Steadman. I work for Celanese. It's a multi-  
46 billion dollar, multi-national company with a lot of plants in the United States. We already voluntarily  
47 report to the DOE our emissions. We are in favor of the President's greenhouse gas reduction. Here in  
48 Washington I'm also the climate change task force chairman for the National Association of  
49 Manufacturers and the Energy task force chairman for SBI. I'm only going to speak in the first capacity  
50 for Celanese, my company.

1 First, looking at the chart, we're in the business of trying to stay in the United States and  
2 make products and keep jobs. The only thing I see missing up there is the amount of CO<sub>2</sub> emitted by the  
3 employees as they work. So my point is, here is a level that we're willing to report, or should, in order to  
4 keep jobs in the economy. Once you go beyond what I call common sense, a cost benefit analysis with a  
5 marginal productivity benefit doesn't justify the cost difference, you're in huge trouble. So I think the  
6 challenge here is to figure out exactly what level to attempt. I'll go back to Kristin's point, maybe there is  
7 a level -- certainly levels that make common sense on a voluntary basis. Beyond that, to report further  
8 than that without any incentive --

9 And by the way, a gentleman mentioned caps earlier today. We're totally against caps --

10 FACILITATOR BROOKMAN: We haven't gotten to caps yet.

11 MR. STEADMAN: Anyway, common sense.

12 FACILITATOR BROOKMAN: Okay, I'll go to you and then to you and then I'll swing  
13 back this way. As briefly as we can. I think we're about to finish with this slide here is the sense I'm  
14 getting, so I'm thinking about moving on after the next few minutes.

15 MR. ALARCON: Briefly, then. Carlos Alarcon, CO<sub>2</sub> Financial. If the transferability is  
16 one of our end goals, we need to have a common, and workable set of metrics -- that is also going to add  
17 to the credibility of this program in going forward. So I would be dissuasive of adding these sorts of  
18 variables. And the second point, you undermine verifiability and standardization and hence, less  
19 transferability.

20 FACILITATOR BROOKMAN: And so, multi-tier plus multi-layers of verifiability --  
21 that doesn't work for you either?

22 MR. ALARCON: Another time, perhaps, but to get started, to begin to develop  
23 standardization and consensus, I think this is key.

24 FACILITATOR BROOKMAN: Great. Greg McCall.

25 MR. McCALL: Greg McCall. American Electric power. We seem to be agreeing on this  
26 point. We're strongly in favor of direct -- primary focus on direct emissions, and certainly want to  
27 provide means for recognizing indirect improvements. But I just know I've been in charge of managing  
28 our SO<sub>2</sub> emissions allowances, and that becomes, even though it's a much simpler program than this  
29 probably would be if we ever get into crediting. It gets very complicated, very quickly, and we are really  
30 strained in coming up with the complexity of just the SO<sub>2</sub> program, and [inaudible] best. We would  
31 strongly encourage as simple a program as possible.

32 FACILITATOR BROOKMAN: Are there any other major distinctive viewpoints on  
33 indirect? You're going to have to be brief. I'll go with the four of you right there. One, two, three, four.  
34 As brief as possible. Name please.

35 MS. GREENWALD: Judy Greenwald, Pew Center on Global Climate Change. I just  
36 want to mention that the reason we want to go after indirect is that in order to get the coverage of  
37 emissions, it's going to be a lot easier to go after indirect through companies, in many cases, than for  
38 example to individuals. A very large fraction of greenhouse gas emissions are emitted by average people  
39 and average businesses, and you don't want them reported. So having companies report some of those  
40 emissions indirectly will actually help you with your coverage. And in many cases it would be easy,  
41 unlike the comment earlier, that should be easier to get at them indirectly, than to try to get them directly  
42 through individuals. Then the coverage you want to allow for and encourage indirect reporting, but we  
43 want to keep direct and indirect separate and you allow for those reporting so that you don't do double  
44 counting. You can make sure you only add up the direct, don't mix them up, keep them separate.

45 FACILITATOR BROOKMAN: That's a useful distinction. It's a big thing if you can do  
46 it, it's a good thing to do is what I think I'm hearing you say. Go ahead. You're next.

47 MR. DAVLIN: Todd Davlin from Grainger Electric Company.

48 FACILITATOR BROOKMAN: Say it again, please.

49 MR. DAVLIN: Todd Davlin from Granger Electric Company. Just one thought on  
50 multi-tiered systems. I think it would make things too rigorous. We have a lead group of companies able

1 to provide and purchase credits and I don't think that will --

2 FACILITATOR BROOKMAN: Thank you. Who else was over here I saw? Four  
3 persons in the queue. Go ahead. And then to Janet.

4 MR. KLEIN: I'm Dan Klein, 21st Strategies. My comment is on indirect emissions as  
5 they relate to electricity. I think that's the biggest source of indirect emissions for most. It's one of the  
6 most vexing problems we run up against in terms of trying to measure and quantify and track [inaudible]  
7 said. I'd like to suggest there may be other ways to look at it drawing from other sectors which have  
8 somewhat analogous situations.

9 For instance, the natural gas pipeline counts its emissions from the fuel it uses in moving,  
10 transporting the gas and whatever methane might be there. But the BTU associated with natural gas that  
11 is consumed is not counted in their system. Similarly, in a petroleum refinery will measure as direct  
12 emissions, the amount of energy it uses in transporting crude oil and products. But the gasoline I put in  
13 my car, is my direct emission.

14 You can see the similar concept with electricity, where the kilowatt hour I consume  
15 which has I think 3400 BTU could be defined if DOE would choose to do so, as my direct emission. The  
16 remaining BTU used in taking whatever fuels and sources in burning that kilowatt hour, would be the  
17 responsibility of the generator. So if you had, say, a 10,000 BTU heat utility, generate would take as its  
18 emissions the 6000 or 7000 BTU it took to regain that kilowatt hour, and the end user would take as their  
19 direct emissions the embedded greenhouse gases associated with the 3400 BTU that that kilowatt hour  
20 represents.

21 FACILITATOR BROOKMAN: Thank you. Janet Ranganathan. Closer to the mike,  
22 please.

23 MS. RANGANATHAN: The question of whether to direct or indirect really depends on  
24 the goals of the 1605(b) program. If the desire to incentivize is one of those goals, I think it is important  
25 to at least include the issue of the emissions from imported electricity into the states because you can  
26 create gross disincentives if you don't.

27 If, for example, you're a company that's importing electricity, make the decision to build  
28 an on site efficient emissions plant, if you're not reporting your indirects, it would just show as an  
29 increase in your emissions. So that's an incentive issue.

30 With regard to the difficulties in actually measuring emissions from indirects,  
31 electricity's not too difficult. The utility does provide this information -- everyone knows what they use  
32 in their electricity bill, they get one.

33 Another approach that some countries have taken, the UK for example, has specified  
34 what the emissions factor is for the whole UK grid. So unless you've gone outside with a specific  
35 contract for green power, everyone uses that, so it's quite simple.

36 The third issue that's being discussed about who actually owns the indirect reductions.  
37 I'll go back to a comment that was made earlier by someone, I think it was the Connecticut Enterprise --  
38 that really who owns the reduction is not necessarily who owns the source, but who can prove that they  
39 invested in the action that actually results in the reduction.

40 FACILITATOR BROOKMAN: Thank you. Yes.

41 MR. JONES: Russell Jones from the American Petroleum Institute again. Going back  
42 to, I think the questions about what is the purpose of dialogue is a key one, and part of it is the President's  
43 goal of transferable credits, but also as Jim Connaughton noted, the 1605(b) program is an information  
44 tool to promote identification of options, spur some thinking. The program allows and promotes a lot of  
45 flexibility and a lot of learning over the next decade.

46 FACILITATOR BROOKMAN: Thank you. Any more comments on this slide. Yes,  
47 sir.

48 MR. CICIO: This is Paul Cicio, Industrial Energy Consumers of America. Any  
49 responsible industrial consumer will want to account for the major indirects. When we get to the cost  
50 issue that we've heard about already. And so we need to establish a reasonable, and rational diminibus.

1 For example, if a gas is five percent or less of your emissions, that's diminibus -- it gets too costly. And  
2 when you get to these other indirect elements on the bottom part of that chart, they become diminibus to  
3 most manufacturers.

4 FACILITATOR BROOKMAN: The other registries that I've looked at, or the other  
5 systems that I've looked at have some definition regarding diminibus, as I recall. Is that not correct?  
6 There's some notion of that in the other models that may exist out there. Other comments on this slide?  
7 Yes, Greta.

8 PARTICIPANT: Do you want to get into the diminibus discussion here?

9 FACILITATOR BROOKMAN: No, I don't think so. Later. On this slide, other things  
10 that about converting and estimation, I think we've talked about this one fairly adequately. Final  
11 comment and then we'll get on.

12 MR. LYON: Tom Lyon, Resources for the Future. With regard to the value of  
13 measuring indirect emissions -- if our purpose here is to actually account for emissions and not deal with  
14 reductions, which is deferred to a later part of the agenda, for the purpose of electricity, I don't see much  
15 value of it. For the purpose say, of measuring emissions from automobiles, there may be an argument for  
16 indirect measurements, because measuring the emissions from each direct emitter is a very costly  
17 nuisance. But it might be that it would be feasible to measure indirect emissions through Exxon, Mobil,  
18 Chevron, whatnot -- they could account for their sales of gasoline, and then we wouldn't have to try to  
19 monitor each individual automobile.

20 FACILITATOR BROOKMAN: If you could do it, if you wanted to be as complete as  
21 you could, indirect is encompassing large -- very large, is it not? And so if you could do it, there's a great  
22 benefit in it -- okay. I'm going to move on to the next slide. Operational boundaries and related issues,  
23 gases and sources covered. The Department of Energy wishes your thoughts on requiring/encouraging  
24 reports of all six UN -- climate change gases -- what's the full designation? Thank you. Framework  
25 Convention -- that's the word I wanted -- Framework convention on climate change gases and others, and  
26 practical limits to emission measurement and reporting, e.g., very small sources, difficult sources to  
27 measure. Comments on these? All six gases or no? Others in addition to the six? Janet Ranganathan.

28 MS. RANGANATHAN: If the goal is to reduce greenhouse gas emissions broadly, it  
29 makes sense to identify all six gases, although CO<sub>2</sub> is obviously a very important one. For certain  
30 industries, the other gases represent major opportunities for reduction and should be --

31 FACILITATOR BROOKMAN: Should be you say?

32 MS. RANGANATHAN: -- should be an opportunity for them to account and report for  
33 those --

34 FACILITATOR BROOKMAN: And should there be a diminibus? Should there be a  
35 level -- how do you handle it if your emission is very, very low in a few of the six?

36 MS. RANGANATHAN: I think we should focus on the significant sources first. If a  
37 gas represents 85 percent of the inventory then we need to start picking up the other ones.

38 FACILITATOR BROOKMAN: Lee Anne.

39 MS. KOZAK: Lee Anne Kozak, Southern Company. In terms of the issue of the six  
40 gases, I think some judgement needs to be allowed there, certainly to allow reporters to include all six,  
41 but also give them the flexibility to include the ones that are major to their particular activities and  
42 operations.

43 In terms of the question of diminibus, I think again that some judgement needs to be  
44 allowed there. If you give a system that specifies that well, if the emissions are only one percent or five  
45 percent of your total, you can exclude them, you get into the circular argument that you then have to go  
46 and quantify them to demonstrate that they are off in that diminibus to be able to not report them, so  
47 you're still asking folks to go through all the work, time and expense to do that, and I don't think that's a  
48 reasonable system to get at the core and to avoid reporting.

49 FACILITATOR BROOKMAN: Thank you. Tom, and Bill, you're next.

50 MR. CARTER: Tom Carter, Portland Cement Association. I agree that it makes sense --

1 FACILITATOR BROOKMAN: Let me make a comment, folks. It seems for me, I don't  
2 have a mike, each of these mike stands has a speaker on it, so maybe -- if you can pull the microphone up  
3 close to your face, I think it will help us understand.

4 MR. CARTER: I would endorse reporting all six gases. In terms of diminibus, I think it  
5 makes sense to have some sort of diminibus level, but I think that that level should differ depending on  
6 the global warming potential of that gas you're talking about.

7 FACILITATOR BROOKMAN: Thank you. Bill.

8 MR. FANG: On the diminibus issue -- I'm sorry, Bill Fang with the Electric Institute and  
9 also the other six power sector organizations. A rule of thumb that could be contemplated, and Lee Anne  
10 gets to kind of the source rule of thumb or threshold. The other rule of thumb has to do with what we  
11 call the extent of reporting, where it's an entity kind of issue when you look at it that way. In other  
12 words, should there be some percentage beyond which you do not need -- you only need to report -- you  
13 don't need to report beyond a certain percentage of your gases, and we suggested some numbers, but the  
14 numbers aren't so important as the concept, I think, and certainly for electric utilities. CO<sub>2</sub> is the  
15 predominant greenhouse gas problem, probably 95 percent of all emissions from power plants, so that's  
16 another rule of thumb that DOE should look at.

17 FACILITATOR BROOKMAN: Thank you. And I'm sure -- let me say another thing  
18 about written comments that follow this workshop. The Department has already made a broad invitation  
19 for follow up written comments from this workshop and for the participation in the other three  
20 workshops. The kind of specifics that you're referencing there, Bill, I'm sure they'd welcome those things  
21 specifically. Yes.

22 MR. CUNNINGHAM: I'm Dan Cunningham. Con Ed. I think all six gases should be  
23 included. I would agree with Lee Anne that [inaudible] entity, however that is defined. As far as a  
24 diminibus value, it's really up to the reporter verify the credibility to those emissions reports.

25 FACILITATOR BROOKMAN: Janet's comments suggested the kind of the reporters,  
26 the companies involved and the evolutionary aspect of kind of working out those issues. Yes, you're  
27 next.

28 MR. PETERSON: Hi, Tom Peterson, Center for Clean Air Policy. Just to make sure  
29 we're all speaking the same language. This perhaps cuts across the paper. Do not confuse diminibus for  
30 a particular answer for your facility. With this issue of small sources where you have cumulatively  
31 extremely large percentages of emissions tied up in very small actions. This obviously is the issue in  
32 transportation and other household things. I know we get to that in small sources, but it seems that that  
33 also leads to some of these other areas. We need to make sure we don't leave out those areas that  
34 cumulatively are very high.

35 FACILITATOR BROOKMAN: Thank you. That's a useful distinction. I hope I didn't  
36 contribute to that confusion. You're next.

37 MS. EATON: Rebecca Eaton. World Wildlife Fund. I just want to reiterate that  
38 certainly that the THG protocol that people are participating with -- to advocate the reporting of all six  
39 gases, and I do think that materiality threshold does need to be defined for all participants. I don't think  
40 that should be left up to reporting entities, whether that's 85 percent, 90, 95 percent. Again, there are  
41 educated rules of thumb and ways of estimating that last percentage so companies are [inaudible]  
42 stakeholders say that it gets very costly to even understand what the remaining percentages are, but there  
43 are some very useful rules of thumb about that. The THG protocol --

44 FACILITATOR BROOKMAN: Thank you, that's the other word that's used in this  
45 context, is materiality. Would you want to give us a brief definition of materiality? Can you do that?

46 MS. EATON: I was primarily using it in terms of a company trying to look at, say, all of  
47 the sources of emissions that they have, using a best estimate to say we feel that these 90 percent of our  
48 produced sources are going to show 90 percent of our emissions. That's the material threshold. Or if that  
49 community, the stakeholders, FGO's (ph) business and the federal agencies decide the companies need to,  
50 to the best intent, report 95 percent of their sources and their 4-CO<sub>2</sub> equivalent emissions, that would be

1 the materiality threshold for them.

2 FACILITATOR BROOKMAN: Thank you. Additional comments on this slide? I'm  
3 getting the sense that it's about time to go take a break. And the coffee's out there waiting for us. Any  
4 final comments on this slide? Yes, please. Mary.

5 MS. QUILLIAN: Mary Quillian, Nuclear Energy Institute representing nuclear power  
6 industry associations here. I would just put a very caution in. As power industries may change over  
7 time, you may for example, have a power producer that only owns wind farms, or only owns nuclear  
8 plants, or other non-emitting sources. If you start to say that they need to report 95 percent of their  
9 emissions, you are now requiring them to report all of the diminibus emissions that are very costly and  
10 very difficult to calculate, because they -- the nature of their business doesn't produce the CO<sub>2</sub> that other  
11 similar industries may produce. So just take that into consideration.

12 FACILITATOR BROOKMAN: And how would you address that?

13 MS. QUILLIAN: I think rather than -- perhaps you have as a rule, the definition of  
14 diminibus that is not only associated with percent but also activities or specific types of greenhouse gases  
15 that come from very minimal activities on a plant site.

16 FACILITATOR BROOKMAN: Okay, thank you. Other comments on this slide? Let's  
17 take a break. It's 10:55, we will resume at ten minutes after eleven. Let's start back up then. You have to  
18 move quickly all of you, and you can plan that we'll be working at least until 12:30 before we take lunch.  
19 Thanks for a good start on the day.

20 (Whereupon, a 25 minute recess off the record was taken.)

21 FACILITATOR BROOKMAN: Please take your seats. The next item on the agenda --  
22 that is to talk about measurement and accounting methods. You just page this thing down to go to the  
23 next slide? You can see the next item on the agenda on this slide here, measurement and accounting  
24 methods. The bullets that we hope to discuss in this segment are initial reporting years, e.g., 2003 or  
25 after, 1987 or after -- the traditional reporting period for the current registry. Emissions  
26 measurement/estimation methods. Fossil fuel use and emissions of non-fossil gases. Confidentiality  
27 issues -- we'll go into data, DOE protected data. The state, national and international or other protocols.  
28 And comparability across sectors. So that's the cluster. Who wants to start? We're going to start with  
29 initial reporting years first. Let's do these in order, since they seem particularly meaning to me. Let's  
30 start with the reporting years. That's where we'll start, and what to do about the existing registry. Please  
31 -- your name for the record.

32 MR. STREITER: Bob Streiter with the Aluminum Association. We feel very strongly  
33 that when you have data that can be verifiable and documented, that you need a year 2000 base year  
34 allowed in the reporting.

35 FACILITATOR BROOKMAN: If you do -- is that what you say?

36 MR. STREITER: Yes. If you have the data verified.

37 FACILITATOR BROOKMAN: Okay, thank you. Other comments? Please, Bill Fang  
38 and then Kristin.

39 MR. FANG: Bill Fang with the Edison Electric Institute. The statute clearly talks about  
40 a baseline years or base year, 1987 to 1990, which there is no getting around that. Perhaps the issue  
41 could be addressed -- and I assume there will be some discussion later, if not, I'll talk about it now, on  
42 what to do with prior year reports -- or past year accounting and so forth. But, so that's what makes it  
43 difficult in talking about a particular year, I think you've got to allow that -- for the statute, to go back to  
44 '87 or '90, and pick up from here. The way that we would suggest to do this, is you could have  
45 transferable credits, or baseline protection -- those are two distinct concepts and I can elaborate on that at  
46 a different point -- from this point on, and then for prior year reporting, you've got a credit for past action  
47 or credit for prior action.

48 FACILITATOR BROOKMAN: Credit for past action and credit for --

49 MR. FANG: Prior.

50 FACILITATOR BROOKMAN: Okay, Kristin.



1 MS. ZIMMERMAN: Kristin Zimmerman, General Motors.

2 FACILITATOR BROOKMAN: Excuse me, I want to clarify. Bill, turn your mike back  
3 on. When you said credit, you mean a notation, that is, there be a registered factor, it's not credit as  
4 transferable credit?

5 MR. FANG: I think the four agency letter on July 8th only talked about a placeholder  
6 for prior year reports, so we think that DOE needs to grapple with that issue head on, and deal with all  
7 three of those concepts -- transferable credit, baseline protection and prior reports in terms of recognition  
8 and crediting. All those issues need to be thrashed out.

9 FACILITATOR BROOKMAN: We'll get into those later as we go along today. Kristin.

10 MS. ZIMMERMAN: I would support and hope that the DOE is open to flexibility, that  
11 if a company's been using verifiable guidelines since day one in their reporting, regardless of what year,  
12 if it's verifiable by a third party, so be it. They can enter into the scheme. If it can be moved right into  
13 that registry for transferable credit.

14 FACILITATOR BROOKMAN: So it's a new registry -- if the revised registry has a level  
15 of rigor that's much greater than the one presently, but the company nevertheless met that new standard,  
16 it's okay? Okay. Other comments on initial reporting years. Yes, please, David.

17 MR. DONIGER: Let's be clear about the man behind the curtain.

18 FACILITATOR BROOKMAN: You've got to be louder, David.

19 MR. DONIGER: Let's be clear about the man behind the curtain. If you're trying to  
20 develop the basis for tracking emissions in the out years, then measuring emissions from now on or some  
21 recent year on is all you need for that. If one is talking about earlier years, then one needs to think about  
22 why we're interested in that. It's largely because of the assumption that future allocation schemes will be  
23 based on grandfathering, and they don't have to be based on grandfathering, and they can make this  
24 problem of accounting for past emissions go away. It's a different system, we'll get back to that later, I'm  
25 sure.

26 FACILITATOR BROOKMAN: Okay, thank you. Other comments on initial reporting  
27 years? I see none. Emissions measurement/estimation methods, also fuel use, emissions of non-fossil  
28 gases. Who wants to start? Please.

29 MR. PETERSON: Tom Peterson again, Center for Clean Air Policy. Again, a note, I  
30 think, dealing with transportation and that could deal either at a corporate level, particularly fee-related  
31 emissions or getting into other entities, state and local. But the ability to use fossil-based measures -- you  
32 know, gallons of gasoline consumed, or VMT measures as a way of being able to estimate or track, is  
33 essential in that area and that would be, I think, very useful to have guidelines that permit that in some  
34 appropriate fashion.

35 FACILITATOR BROOKMAN: Thank you. yes, please.

36 MS. LEV-ON: Miriam Lev-on on behalf of the American Petroleum Institute. We  
37 would urge the DOE to include, at least by reference, the API compendium of methods for estimating  
38 greenhouse gas emissions for the oil and gas industry. We know that it was developed specifically for oil  
39 and gas industry members, but one of the primary chapters, the chapter on combustion, is highly  
40 applicable to all of industrial and commercial combustion in the US. It does not relate to utility type  
41 emissions or combustions, but all the other types of combustions it will be highly applicable. API is  
42 taking great effort also to reconcile and harmonize these methods with other oil and gas industry sectors  
43 from around the world. So we would urge that this be included, at least by reference.

44 FACILITATOR BROOKMAN: Thank you. Kristin.

45 MS. ZIMMERMAN: I would lend caution to using VMT or vehicle miles traveled to  
46 calculate any accuracy in the emissions of motor vehicles in the product use phase. Example I would use  
47 is ten miles on an LA freeway. One day will take you ten minutes, the other day might take you an hour  
48 and a half. The CO<sub>2</sub> profile, the emission profile is very different between those two scenarios. So I  
49 would not want to use that inaccuracy in formulating what baseline would be, for say, General Motors or  
50 an automotive company, or anybody who would want to take some type of estimation or measurement of

1 that piece of their emissions.

2 FACILITATOR BROOKMAN: Would it be possible if you had a fleet of vehicles and  
3 they were largely similar kinds of cars and you knew -- I just want to push you on the spot a little bit.

4 MS. ZIMMERMAN: No. The best measure would be gallons of fuel used. That's the  
5 most accurate. We can get our arms around it. We already track that type of data at the national level, so  
6 I would go with that. And then you don't have to look at the capacity of the engine or anything like this,  
7 just look at fuel used -- diesel versus petroleum gasoline.

8 FACILITATOR BROOKMAN: And how do you convert that?

9 MS. ZIMMERMAN: There are emissions factors for them.

10 FACILITATOR BROOKMAN: And you feel like they're sufficient?

11 MS. ZIMMERMAN: Indeed.

12 FACILITATOR BROOKMAN: Okay, that's what I wanted. Yes.

13 MR. STREITER: Bob Streiter again with the Aluminum Association. We have adopted  
14 a bottom line approach for direct emissions accounting as specified in the WRI protocol. We think that's  
15 the most accurate way to develop those emissions. It's important, though, that our protocol here be able  
16 to have allowances for emissions factors that are developed that are more accurate, more up to date. For  
17 example, the IPCC emission factors for aluminum production are out of date and have been improved  
18 dramatically with cooperative research with EPA, so it would be necessary for us to input those factors in  
19 our reporting protocol. Oh, by the way, I meant to say 1990 as a baseline, not 2000. I misspoke.

20 FACILITATOR BROOKMAN: You're next.

21 MR. BARBOUR: Yes, again, Wiley Barbour with ERT. On the issue of transportation  
22 emissions, we had some debate this morning about should we use gallons or should we use VMT and so  
23 forth. And this issue also came up in the previous meeting to discuss this process at the Meridien  
24 Institute, and I'll just repeat, if I may, very briefly, some of that discussion which is: for CO<sub>2</sub> emissions,  
25 yes, gallons burned is the most accurate way to come up with an accurate CO<sub>2</sub> emission for the  
26 transportation sector. However, that does not give accurate emissions for N<sub>2</sub>O and methane. The  
27 highway vehicles are the largest source of N<sub>2</sub>O, aside from agricultural sources, and a significant  
28 uncertainty surrounds the emission factors that are being used.

29 During the Meridien Conference a question was asked to Kristin Zimmerman from GM,  
30 has GM developed emission factors for N<sub>2</sub>O. She answered yes. And the question was, will those be  
31 available, and the answer was no. So if we're serious about measuring greenhouse gas emissions, I think  
32 emission inventory relies on emission factors, developing emission factors across the board, sharing that  
33 information is critical. And we all know that N<sub>2</sub>O emissions from motor vehicles are among the most  
34 uncertain of all the factors in our greenhouse gas inventory, and working together with automobile  
35 manufacturers, I would hope that we could improve those factors.

36 FACILITATOR BROOKMAN: Thank you. I see a few persons that are kind of  
37 nodding their heads in agreement -- I want to give them a chance to chime in. Such as you, Janet  
38 Ranganathan. No? Okay. Others? Yes.

39 MR. CASHIN: Mike Cashin with Minnesota Power. When it comes to estimation  
40 methods for fossil fuels, even in the electric sector, we still are challenged. I agree that fuel measurement  
41 is an accurate means of reporting emission monitoring for CO<sub>2</sub>. We run into issues of flow measurement,  
42 uncertainty can vary, and we have data substitution that biases the high reporting of [inaudible] down  
43 time. So I think it would be important that the reporting entity have the flexibility to use what they  
44 would consider the best quality characterization available for their activity.

45 FACILITATOR BROOKMAN: So how do you do that in practice?

46 MR. CASHIN: I think in practice you have both methods available, and you would need  
47 to exercise judgement in terms of quality, and I would anticipate that the verification process that's  
48 established would have some guidance as to whether your judgement is valid or not.

49 FACILITATOR BROOKMAN: Okay. Other comments on emission measurements and  
50 estimation methods? Yes, please.

1 MR. PETERSON: Just a follow up comment on the VMT versus fuel use issue. One  
2 critical issue is the level of reporting, and whether there is an interest in reporting being done at a sub-  
3 federal level. While fuel use can add up at a national level in an accurate way, as you break it down into  
4 lower levels -- state, municipal levels where it's more relevant for policy purposes, it becomes more  
5 difficult to use fuel measures alone, and indeed often they have to be combined with other measurement  
6 methods, such as the VMT methods. And just a note that the VMT methods are sufficiently complex that  
7 they involve speed calculations and other adjustments, and that those are essential. So collecting data in  
8 two forms may be important in some areas in order to get it down to the level at which it's appropriate for  
9 reporting and policy.

10 FACILITATOR BROOKMAN: Thank you.

11 MR. SKERNOLIS: Ed Skernolis with Waste Management. I actually have a question  
12 for someone who might be more expert than I on the VMT issue. We operate a large fleet of vehicles,  
13 about 30 to 35,000 collection vehicles around the United States. We're faced with a diesel fuel and  
14 engine issue where we're going to be turning over our fleets over the next four years to several different  
15 types of engines. I dare say none of them have any sort of estimation methods associated with them, and  
16 I don't know if any of the people who are more directly involved in this are aware of how much they  
17 think those estimation methods will have to vary because of the change, both in the engines, the types of  
18 engines, the technology in the engines, and the fuel we're going to be using between now and 2007. And  
19 as we rotate our fleet, we're going to have mixed fleet using old engines, intermediate engines, new  
20 engines, old fuel, new fuel, et cetera.

21 FACILITATOR BROOKMAN: And so you raise a lot more -- and this is another layer  
22 of complexity here, and obviously this is the topic of another workshop. Does anybody know the answer  
23 to that? Anyone can be responsive to Ed's question? Would you raise your hand if you do? If you don't  
24 want to address him now, but I want you to approach him at lunch. Can you do that, Kristin? I'm  
25 serious, because I really want to keep on task here.

26 MS. ZIMMERMAN: I would just out that it's very complex.

27 FACILITATOR BROOKMAN: You asked a complicated question. I didn't see any easy  
28 answer in the room right now. Was there any additional comment on non-fossil gases? No additional  
29 comment on non-fossil gasses. Confidentiality issues. Withholding some data, DOE protecting data? I  
30 noticed that in some of the other -- as I read the background materials, people are expressing -- as I read  
31 the comments that were in the comment summary, some people are saying transparency is everything and  
32 all this data should be public, and other people are saying it's absolutely the necessity if you want fully  
33 and accurate reporting that confidentiality be preserved. Comments? Yes, Kristin.

34 MS. ZIMMERMAN: Kristin Zimmerman again. Back to the multi-tier approach. And  
35 if the second and third tiers, you know, moving up to the blue chip, include this third party coming in,  
36 maybe the public data that can go on the site is the aggregated totals -- that's what's going to show the  
37 progress. But when you get to the point where you're transferring or wish to transfer credits or tonnage,  
38 you have to have, I believe, a third party -- an independent from the government party come in, do the  
39 verification, certification, and value the quality -- yellow or blue chip -- to that particular CO<sub>2</sub> tonnage.  
40 So the confidentiality, I would say, if you have any intention to transfer, it's got to go out to the third  
41 party.

42 FACILITATOR BROOKMAN: Okay, thank you. Yes.

43 MS. EATON: Rebecca Eaton, WWF. I think it's very important that all of the  
44 information reported is transparent. It's going to be the basis for having anything that's considered  
45 remotely credible to the American public and to other stakeholders interested in tracking companies'  
46 performance and our country's performance over time. That also should be transparent down to the  
47 facility level.

48 FACILITATOR BROOKMAN: Say more about what you mean by transparency. Is it  
49 possible for it to be transparent and still not cause different facilities or different companies to give away  
50 what they would call -- what they would see as kind of proprietary information about their businesses?

1 MS. EATON: Well, I think it's kind of a stretch to say that someone's going to doubled  
2 (ph) in proprietary information if they're giving away plant level overall greenhouse gas emissions data.

3 FACILITATOR BROOKMAN: You couldn't see that output levels of some kinds of  
4 gases might correspond to production levels, for example?

5 MS. EATON: I'm not sure. I would suggest that that's not going to be a proprietary  
6 issue. I think that if you're talking about a transparent system that's going to be tracking corporate  
7 performance over time, if you start just allowing companies to report aggregated information, and also  
8 let's say you are starting to allow companies to have emission reduction initiatives in there, or  
9 sequestration investments, there is going to be no understanding of whether those are direct emissions or  
10 indirect emissions -- sequestration investments. So I think the credibility starts decreasing precipitously  
11 if you start reducing your transparency, especially if you start focusing on aggregated information.

12 FACILITATOR BROOKMAN: And even with third party verification?

13 MS. EATON: Even with third party.

14 FACILITATOR BROOKMAN: I saw you first, and then I saw David, and I'll scan out  
15 from there.

16 MR. MELMORE: Ivor Melmore, with the City of Olympia. I think I'm one of the other  
17 city representatives here. I'll just put my two cents in there, but I would think that all the information has  
18 to be public, and then the industries themselves, because it's intensity measurements, so much per  
19 production unit, can be used in their advertising campaigns to say they're better than somebody else, and  
20 that increases the participation and possibly the success of this whole project. So if it was public, it  
21 would be much better.

22 FACILITATOR BROOKMAN: David, you want --

23 MR. DONIGER: Just a note that this is not really a new issue. Industries have been  
24 living for 32 years under a regime in the Clean Air Act, where the emissions data, the supporting data  
25 that's needed to verify emission data are not entitled to confidentiality. This is another set of gases. It's  
26 the same problem. It shouldn't be any different.

27 Now, I make one comment. It's an inference I picked up Bill Fang's comments, that Bill  
28 is sticking very close to 1605(b) as is written right now. The exercise which the Department's involved  
29 in is somewhat broadly written to include recommending reforms. And if reforms can be accomplished  
30 within the existing statute, fine. If they need to be enacted through new legislation, that may also be a  
31 possibility. But I think the Department should be looking to design the best system, not necessarily the  
32 best system within the constraints of existing statute.

33 FACILITATOR BROOKMAN: Thank you.

34 MR. FANG: I'd like to follow up. Bill Fang, Edison Electric Institute. Several  
35 comments. In response to David Doniger, I think the Department is bound by the current statute. It can  
36 certainly -- anybody can suggest new legislation or amendments, but that's not the purpose of this  
37 exercise as I understand it, for us to be here today.

38 On confidentiality, several comments on that too. This is a voluntary program, and to the  
39 extent that confidential data is not protected, it's going to discourage participation. There are going to be  
40 reporters from businesses or industry who are simply not going to report if they do not have some  
41 assurance of confidentiality. Now, how would we address that? What are some possible solutions? I  
42 have a couple of thoughts on that.

43 This is the case, I think, in several agencies. Reporters are often allowed to mark certain  
44 data as being confidential. The agency, in this case, DOE, would look at that and then if there is  
45 someone who wants the confidential data, then the reporter who had marked the data would be notified  
46 of that. In that case the reporter would have two options, either go to court and file a reverse FOIA suit  
47 and prevent the release of the data, or it could simply withdraw the data. Those would be two possible  
48 solutions. There are others. And we also note in the background papers, DOE has indicated, or perhaps  
49 it was EIA, that no one has ever requested confidential data. So we don't think this should be a huge  
50 problem, but we do think there should be some assurance of confidentiality, and a couple of revisions to -

1 - or a couple of procedures to protect that data.

2 MR. McARDLE: Paul McArdle from EIA. The confidentiality issue -- just as a point of  
3 reference, and also to address that prior comment -- information that's submitted to DOE and EIA,  
4 actually, is subject to the FOIA, Freedom of Information Act, and folks can ask us to keep the data  
5 confidential and we make a determination whether it fits an exemption under the FOIA. Now there have  
6 been a handful of requests over -- let's see, we're in our seventh year of collecting data -- we've had a  
7 handful of confidential reports that have been granted confidentiality. For example, this current data  
8 cycle, I think we have one confidential report. So -- we have had requests, and we have granted them,  
9 but they're clearly the minority. For example, in the coming year I think we're going to have 229  
10 reporters, I think one -- we'll have one confidential report.

11 FACILITATOR BROOKMAN: Most of those entities are they reporting at the project  
12 level or at the corporate level or is it the full spectrum? Can you say what it is?

13 MR. McARDLE: Well, I can't -- I'm trying to remember who the confidential reporter is.  
14 I'm not sure if they filed an entity level report or a project level report.

15 FACILITATOR BROOKMAN: Can you say what the basis for seeking confidentiality  
16 statement was?

17 MR. McARDLE: I'd have to go back, but generally it deals with their business practices  
18 and competitiveness, that they're giving up data that they feel their competitors can capitalize on to put  
19 them at a disadvantage.

20 FACILITATOR BROOKMAN: Yes, Jim. You've got to speak right into it.

21 MR. GATES: Jim Gates (ph) [inaudible] Associates. A couple of those reporters -- the  
22 companies that were reporting have just been bought out by a new company, and the new company that  
23 bought the reporters out said we haven't even seen that data yet -- to look at it. So the confidentiality  
24 [inaudible] the new owners had not seen the report.

25 FACILITATOR BROOKMAN: Thank you. Yes, first you and then you.

26 MR. RAPPAPORT: Aaron Rappaport, Union of Concerned Scientists. If the  
27 confidentiality system works as Bill Fang suggested where a report can be withdrawn, then the continuity  
28 of data from a reporting entity would be disrupted, if there's a request for confidential data, so a company  
29 actually reports for five years and then files a -- and then somebody files a request to see some of that  
30 information and then the report is withdrawn for two years, it seems that continuity of reporting is one of  
31 the keys to the successful voluntary system.

32 FACILITATOR BROOKMAN: Thank you. This gentleman right here.

33 MR. LYON: Tom Lyon, Resources for the Future. I just want to point out that the  
34 confidentiality issues are greatly magnified when we start dealing with energy -- or emissions intensity  
35 measures instead of just overall emissions measures. If we were simply to dealing with the cap and trade  
36 type of situation, there'd be a lot less production data that would be needed to monitor whether the system  
37 is working. But if we really want to play the game based on intensity, then we have to have companies  
38 reporting output level down to the facility, in order to be able to track intensity, --

39 FACILITATOR BROOKMAN: Right.

40 MR. LYON: -- which is an argument against the whole intensity approach.

41 FACILITATOR BROOKMAN: Thank you. Thanks for that comment. Other comments  
42 relating to confidentiality before I move on? Have we covered this issue of confidentiality? I'm not see  
43 anybody else wishing to comment.

44 Let's talk about state level, international and other protocols. Certainly the Department  
45 and Under Secretary Card and others this morning referenced the desire to look hard at the other  
46 protocols, the other work that's out there that maybe they serve as models. Comments on those and what  
47 DOE should do with them? Yes, Janet.

48 MS. RANGANATHAN: I think it's really important that DOE actually builds on that  
49 work. The THG protocol initiative has developed a set of calculation tools and at the specific level,  
50 when dealing with process emissions, for the most part we've tried and have successfully worked with

1 industry. We recently reached agreement with the Pulp and Paper Center, working with a consortium of  
2 international industry associations there, to have calculation tools that work under the umbrella of the  
3 accounting and reporting standards. We've done the same with the cement sector and are working with  
4 the aluminum sector as well.

5 FACILITATOR BROOKMAN: So you're doing that specifically at the central level?

6 MS. RANGANATHAN: Yes.

7 FACILITATOR BROOKMAN: Your calculation tools. Yes, please. Can you hear  
8 him? I think we're -- we have some dead mikes on this side of the room. Over there, yes, maybe you can  
9 use that one. I'm going to ask you in the back doing the recording, if it's dead on your tape, I want you to  
10 let me know. Raise your hand, start waving it. Okay, you're next.

11 MR. CUNNINGHAM: Dan Cunningham from Con Edison. Two things on this issue.  
12 Certainly the DOE should look to states and those other protocols that are more, what I would say,  
13 mature, and seek to try and harmonize or learn -- you know, lessons learned from these protocols. On the  
14 other hand, I would hope that in some way, shape, or form that the DOE would discourage the growth of  
15 state-level or especially local initiatives in light of what we're trying to perform here.

16 FACILITATOR BROOKMAN: And why do you say that?

17 MR. CUNNINGHAM: It just complicates matters down the road, especially if you're a  
18 company involved with states, it is a very cumbersome administrative task to try and deal with multiple  
19 protocols and try and [inaudible] this particular one.

20 FACILITATOR BROOKMAN: Thank you. Other comments on state level,  
21 international and other protocols? Yes, Bill Fang.

22 MR. FANG: Bill Fang, Edison Electric. I can address the state-federal issue first. There  
23 is only one reporting system that we're dealing with here. It's all under EIA. It's a national, and it's a  
24 federal system. So the EIA, and the DOE, they could consider them but they need not adopt state  
25 programs. They need not defer to state programs. It's a federal system, and it's going to be paramount, or  
26 primary.

27 I would also add that other federal systems must be consistent with the EIA registry. If  
28 there is reporting under other protocols, for example, under the EPA Climate Leaders and so forth,  
29 ultimately that's going to have to be harmonized with this system. The problem that I have with what  
30 EPA is doing -- well, let me just call it a concern, I don't want to overblow it because I don't know how  
31 the WRI protocols are going to -- how they're ultimately going to end up.

32 FACILITATOR BROOKMAN: Those are the basis for the Climate Leaders?

33 MR. FANG: Right. One of them is out, one of them is still not out, as I understand it,  
34 but there's no Federal Register process. There is no vetting of stakeholder interests as there is and has  
35 been under the DOE-EIA process. That's a serious defect and in fact something that EPA and WRI could  
36 -- it's not something that WRI can do anything about, but it is something EPA could do something about  
37 if they chose to do so. They've been asked to do so. They have not responded to this point.

38 FACILITATOR BROOKMAN: I feel like we should give EPA chance to respond if  
39 they choose to, and then I'll return to the queue. I'll give them a chance. Actually, yes, Tom first and  
40 then you.

41 MR. CARTER: Tom Carter, Portland Cement Association. I just want to be on record  
42 as saying that for our sector, for the cement sector, we have requested that DOE utilize the board  
43 resources for the Business Council on Sustainable Development approach that they developed for our  
44 industry. We put a lot of work into making sure that working with WRI and the World Business Council,  
45 that was done in an effective way and our request to DOE has been to utilize that approach. That's just  
46 for our sector.

47 FACILITATOR BROOKMAN: Thank you. Alright, give Cynthia a chance.

48 MS. CUMMINS: Cynthia Cummins from EPA. We actually have been going through a  
49 public stakeholder process, it's just not -- it's not like DOE's because we're just a voluntary EPA program.  
50 But we have all our draft protocols out on our website right now and we're accepting feedback from

1 anybody who would like to comment on them.

2 FACILITATOR BROOKMAN: So you're receiving -- your point is that you're receiving  
3 comment from interested parties.

4 MS. CUMMINS: Yes. Any interested party.

5 FACILITATOR BROOKMAN: Thank you very much. Yes, follow on.

6 MS. BOURNE: I am Sandy Bourne with the American Legislative Exchange Council  
7 and I want to speak to the state level involvement. We're already going down the road at that local level,  
8 and I'll put this in writing to you, but we already have 19 action plans that are in states. 37 states have  
9 completed emission inventories. Eight states have emission registries. Seven states have an international  
10 agreement. One state has mobile missions. Thirteen states have renewable energy portfolios. Two states  
11 have emission portfolios. Eight states have source labeling and disclosure. And four states have direct  
12 limits on CO<sub>2</sub>. We're already going down the road.

13 Part of this may be an effort of enforcing regulations to force a federal mandate, but I  
14 think that in the United States of America we want to talk about state sovereignty and maintain that as  
15 much as possible. I know that's hard with big companies, but we do emphasize local control. We're  
16 already going down the road, so I think you ought to just let the states do what they want to do -- with  
17 guidelines.

18 FACILITATOR BROOKMAN: With guidelines.

19 MS. CUMMINS: And you've got the guidelines. So I'll submit this, but there's already a  
20 lot of activity going on into --

21 FACILITATOR BROOKMAN: And I read somebody's summary, perhaps it was -- on  
22 the state, was it, and it struck me that there's a huge variation on what's being done among those things  
23 you listed there.

24 MS. CUMMINS: I have a map that I'll submit to you as well that shows that huge  
25 amount of work.

26 FACILITATOR BROOKMAN: Huge amount of work -- that's the word you used, and it  
27 seems like a huge variation in terms of what you're trying to do --

28 MS. CUMMINS: Sequestration --

29 FACILITATOR BROOKMAN: -- the different levels of things you're trying to  
30 accomplish.

31 MS. CUMMINS: Right. Right.

32 FACILITATOR BROOKMAN: So you're not an advocate of trying to do harmonization  
33 or anything like that. You say let the states do what they want to do.

34 MS. CUMMINS: I encourage state and local involvement. Now, philosophically I'm  
35 still opposed to CO<sub>2</sub>, but what I'm doing here is putting on the plate for you -- there's been a great deal of  
36 work that's going on at the state level. Whether or not we agree with it, it's going on.

37 FACILITATOR BROOKMAN: Okay, thank you. Comments based on that? Go to the  
38 back of the room first, and then to Kristin.

39 PARTICIPANT: I actually wanted to comment on the earlier Edison Electric comment  
40 about the WRI/WBCS THG protocol and the vetting process for that. That -- the protocol's been in  
41 creation development, refinement, since early 1999. I have a copy of it right here. Hundreds of  
42 stakeholders have participated. It's an incredibly public, transparent system. Many of the companies  
43 here have provided comment. We're actually in a process where we're due to have the next version of the  
44 protocol out this spring. Mid-December, we will be going over hundreds and hundreds of pages of  
45 comment. Companies here, ranging from the automotive sector, steel and aluminum sectors,  
46 international electric generation sectors, US-domestic generation companies have all provided comment  
47 over the years to the THG protocol, so I did want to say this has been a very well discussed, well vetted  
48 and there's international consensus on this protocol. So I think it is important for the DOE to look and  
49 learn from that initiative.

50 FACILITATOR BROOKMAN: Thank you. Kristin, and then David.

1 MS. ZIMMERMAN: Just going back to the state level and why certain industries might  
2 not wish to report at the state level. Indeed, proliferation of different guidelines, et cetera. But also there  
3 might be one facility in that state for a company, and it would release competitive-level information, and  
4 indeed we don't want to release at the facility level, to the public. Even knowing that if we wish to  
5 transfer credits from that facility, it would have to go through a third party -- again, that's not public,  
6 that's covered by this confidentiality piece -- but the reason that there's push back at the state level is  
7 because it could open up to facility and/or source level emissions. That opens a whole new  
8 confidentiality --

9 FACILITATOR BROOKMAN: And the layering system that you and others have  
10 described would solve that, correct. David and then I'll go to you.

11 MR. FINNEGAN: David Finnegan from Mayer, Brown, Rowe & Maw. I just wanted to  
12 comment on the WRI proposal. The WRI proposal is being modified by EPA. Normally when that  
13 happens it becomes a government document and it would be subjected to the ABA and normally you do  
14 that through rule-making -- not rule-making, but through the Federal Register. They're not doing that  
15 right now and so while there may be lots of stakeholders involved, it isn't the same way as you're doing it  
16 at the DOE in this process.

17 FACILITATOR BROOKMAN: Okay, thank you. Please.

18 MS. LEV-ON: Miriam Lev-on on behalf of API again. The API and its member  
19 companies are very concerned about potential inconsistencies in the greenhouse gas emission estimation  
20 and reporting under the different programs, with the recognition that states have always done what they  
21 would want to do, and they all seem to take some basic protocols that are floating about, either the WRI,  
22 WBCSD or other similar guidance, and then they modify it to their own needs, and by doing so they add  
23 to the burdens and the inconsistency among the states. So I think that we would encourage DOE to go  
24 for harmonization of methods or maybe develop a recommended core set of -- a core set of  
25 recommendations that states can follow.

26 FACILITATOR BROOKMAN: Yes, I saw this gentleman first, then you.

27 MR. PETERSON: On the state issue, I think it's important to learn from the specific  
28 activities that states are undertaking because they are very policy-specific and it seemed like they were  
29 addressing specific needs in those states that I knew of. They address a wide range of needs within all of  
30 the different sectors, and the centers released a report. The Center for Clean Air Quality recently  
31 released a report, ETO, a great number and so I would hope this exercise would learn from rather than  
32 retard the learning that has occurred at the states. States play an important role as Laboratories for  
33 Democracy, indeed the development of our Title IV and the sulfur dioxide program today is largely based  
34 on state efforts that aggregated up. So it's very, very critical to do that.

35 FACILITATOR BROOKMAN: Thank you. I'd like to move to comparability across  
36 sectors.

37 MR. LYON: Tom Lyon. I also want to speak for learning from history with respect to  
38 the confidentiality question. The toxic release inventory may provide us with an interesting historical  
39 precedence for this stuff. Of course, toxic data from TRI released at the facility level -- it might be  
40 interesting to see whether that's had disastrous competitive consequences for anybody. I understand also  
41 the American Chemistry Council is encouraging, if not requiring its members to report output at the  
42 facility level so that TRI emissions will be measurable on an intensity basis -- and they're voluntarily  
43 doing that, so that raises some questions in my mind as to how severe the confidentiality problems are at  
44 the facility level.

45 FACILITATOR BROOKMAN: Actually I saw Bill first and then Marlow.

46 MR. FANG: Bill Fang, Edison Electric Institute. Going over to the international side, a  
47 couple points that we'd like to make.

48 FACILITATOR BROOKMAN: Bill, hang on. Marlow, you wanted to comment on  
49 that? Let me go to Marlow first and then you --

50 MR. FANG: Okay.



1 MR. LEWIS: Sorry to jump back to the previous question, but it seems that that's still on  
2 people's minds. And something that David Doniger said brought my attention about how there is some  
3 confidentiality of reporting the data associated with earning sulfur dioxide credits, and someone said,  
4 well, this is a voluntary program. And yes, 1605(b) is a voluntary program, but the effort here is to  
5 transform it into a regulatory program. The whole point someone -- one of the panelists this morning  
6 said, the heart of the President's program is transferable credits. Those are regulatory credits. And since  
7 regulatory credits confer competitive advantage on some at the expense of others, I think a higher level of  
8 transparency is required than just reporting emissions data on 1605(b), so I would say if you're going to  
9 report information for the purposes of earning a regulatory credit, then your confidentiality is no longer a  
10 consideration.

11 FACILITATOR BROOKMAN: Thank you very much.

12 MR. FANG: Yes, In terms of harmonizing other international programs with the US  
13 program, that is a more difficult issue. We've all said -- we have comments that addresses and the one we  
14 filed on June 5th on our transfer of credits paper, in particular, pages 5, 7 and 11 -- so I won't bother to  
15 restate those here. The second point that I want to make in terms of what we like in what we see in other  
16 international programs would be from the Canadian Baseline Protection Initiative, that the companies and  
17 industries there are very concerned and they've been reducing their baselines since 1990. It's unclear how  
18 the Canadian -- how that's all going to work out in Canada, but the point is that companies are very  
19 concerned that they be protected under the protocol or any other future final policy, just as companies in  
20 this country are concerned about baseline protection and release of baseline.

21 FACILITATOR BROOKMAN: Thank you. Any other comments on this? Yes, Paul.

22 MR. CICIO: Paul Cicio. Industrial Energy Consumers. I want to address the comment  
23 that's comparing TRI confidentiality to energy, and there is mostly no comparison. With energy -- there  
24 are several energy-intensive processes that manufacturers have, and many times the cost of energy can be  
25 60 percent, sometimes as high as 80 percent of the cost of the product. And that becomes -- divulging  
26 information related to that becomes a competitive issue. With -- in the case of TRI, certainly there are  
27 sensitivities there by companies, and it can have some element of competitiveness, but on a relative basis,  
28 there's no comparison.

29 FACILITATOR BROOKMAN: Okay, thank you. I want to move to the last point. Any  
30 comment -- Steven, and then I'm going to the last point.

31 MR. FODIS: I just want to make a comment as to the purpose of the credits --

32 FACILITATOR BROOKMAN: This is Steven Fodis.

33 MR. FODIS: Yes, I'm Steven Fodis of Van Ness Feldman on behalf of Large Public  
34 Power Council -- that many of our members have internal policies for limiting greenhouse gas emissions  
35 or offsetting new emissions and credits are used for those purposes and they're not regulatory. Having a  
36 system that would establish that would be very useful.

37 FACILITATOR BROOKMAN: Thank you. The last bullet says comparability across  
38 sectors. Comments on that? Comparability across sectors. Yes, please. Lee Anne.

39 MS. KOZAK: Lee Anne Kozak, Southern Company. I think on the point of  
40 comparability, that the importance is not necessarily sector to sector, but that the comparability is  
41 important for a particular type of source, regardless of what sector it's at. The type of measurement,  
42 monitoring, quantification that you might have for an electric generating unit -- it would be, in terms of  
43 the quality of the data, that's where the consistency needs to be -- that's important.

44 When you're talking about comparability among different types of sources that will be  
45 inconsistency, that will be different because of the different nature of those sources.

46 FACILITATOR BROOKMAN: Thank you. Other comments on comparability? Either  
47 across sectors or comparability on specific uses? Please.

48 MR. DONIGER: David Doniger. Well, Lee Anne's comment actually brings into focus  
49 for me the following point. We have in one sector, already, a very good CO<sub>2</sub> monitoring regime -- it's the  
50 electric utility sector. And I would put out at the blue chip standard, that's which you might want to think

1 about how to do other sectors. That doesn't necessarily mean that everybody's -- that every facility is  
2 equally suitable for continuous emission monitoring. But I would put that out there as a first question to  
3 ask, and as a criterion for deciding whether an alternate method would give data that's that good.

4 So there's a very interesting -- it's interesting to me to hear people from the utility  
5 industry arguing for flexibilities that they don't actually enjoy under the system they're subject to. It  
6 might be more productive to think about what the other sectors have to do.

7 FACILITATOR BROOKMAN: I'm going to Bill Fang and then to Civi next.

8 MR. FANG: Bill Fang with the Electric Institute. First to supplement what Lee Anne  
9 Kozak from Southern Company said. Her comment would apply to sinks also -- same types of sources,  
10 same types of sinks in terms of comparability.

11 Responding to Mr. Doniger, Mike Cashin alluded to this earlier. Under the EPA regs,  
12 the facilities are allowed to use estimation techniques, they do not have to rely on CEMS data, so his  
13 statement was incorrect. We have flexibility now, and that's important under -- that kind of reporting.  
14 Under the DOE reporting scheme we'd like to have similar kinds of flexibility.

15 FACILITATOR BROOKMAN: Thank you. Civi.

16 MS. JAMARAYAN: Civi Jamarayan, (ph) [inaudible] ... Public Service. If we are  
17 referring to transferable credits, it is critical to have single form of currency. You cannot have green  
18 dollars, red dollars, et cetera, so there has to be meeting certain minimum performance. Credibility is  
19 very important and you have to have a single currency for that purpose.

20 FACILITATOR BROOKMAN: Thank you. Yes.

21 MR. FANG: I'll just add to that. That single currency, what we're really talking about is  
22 value. And lacking comparability and then being able to determine an equilibrium for supply and  
23 demand will disrupt our perception of the value. So to a sense, yes, we need a green -- not green and red  
24 currencies, but we do need -- we need that currency and also need credibility [inaudible] international.  
25 Thank you.

26 MR. JONES: Russell Jones of the American Petroleum Institute. One of the issues that  
27 the Petroleum Institute has had to deal with in the development of our compendium was the realization  
28 that, as part of this effort we compared six different protocols for reporting methane emissions from  
29 petroleum facilities. And if I arrange from the high to the low, these emission estimates vary by a factor  
30 of six. So the notion that's been bandied around the room that if we had a protocol, we had an answer,  
31 that's true, but is it a good answer? So we have worked very hard -- as Miriam Lev-on has mentioned --  
32 we worked very hard with our compendium effort. We've been working on it for three years. We're  
33 continuing to work on it and for our industry we have some very complex emissions issues that have to  
34 be dealt with to develop our comprehensive and reproducible numbers.  
35 So we think that industries with particular complexities should be allowed to address those.

36 FACILITATOR BROOKMAN: Thank you. Other comments on this? Please, Paul.

37 MR. CICIO: Paul Cicio, Industrial Energy Consumers. We have to realize that there is a  
38 great diversity of manufacturing or industrial energy consumers, and comparability across sectors -- no, I  
39 don't think so. We need -- this is a voluntary program for reporting and testing, and the e-center needs  
40 something that's meaningful to that center to maximize their participation and measurement. So  
41 comparability across each sector, no.

42 FACILITATOR BROOKMAN: Are you say no from the standpoint of desirability or  
43 doability?

44 MR. CICIO: Both.

45 FACILITATOR BROOKMAN: Both. Okay. Yes, please, Janet.

46 MS. RANGANATHAN: Janet Ranganathan, World Ocean Resource Institute. I think it  
47 would be helpful to just distinguish between two things here when we're talking about standardization.  
48 The first, there's standardization of what I call the accounting reporting framework -- issues dealing with  
49 how you define an entity, how you deal with directs and indirects. And I think there should be some  
50 harmonization across sectors there. But then there's standardization of the specific calculation protocol,

1 which calculates the emissions from the source, and they do tend to be sector-specific, except the kind of  
2 cross-cutting sort of things like stationary and mobile combustion.

3 FACILITATOR BROOKMAN: Thank you. Other comments on comparability of  
4 sectors? Have we covered that adequately? I think we pretty much have.

5 We're just about to go to lunch. Before we go to lunch, I want to recognize Bill  
6 Hohenstein from USDA. You wish to make an announcement?

7 MR. HOHENSTEIN: Sure, thanks. First I wanted to ask a few questions. Are there any  
8 farmers in the audience? How about other land owners -- that could include utilities, large companies?  
9 There must be some. How about companies or individuals that are interested in partnering with farmers  
10 or land owners to offset emissions? Good. Or, those of you that might be interested in making sure that  
11 accounting rules and guidelines are credible? There we go.

12 Well, USDA's been asked to develop the accounting rules and guidelines for agriculture  
13 and forestry to fit into the 1605(b) system. And we're having technical meetings to get to this issue of  
14 measurement and accounting rules. They're going to be held in January. The Agriculture meeting will be  
15 on the 14th and 15th, and the forest meeting will be on the 23rd. They'll both be held in the Washington,  
16 DC area, in Riverdale, Maryland. You can now register for these meetings on line, and the information  
17 will be contained in this handout that we'll have in the back of the room. We encourage your  
18 participation and look forward to seeing many of you there. Thank you.

19 FACILITATOR BROOKMAN: Thank you. Before we go to lunch, I just want to thank  
20 all of you for what was a very constructive and really far ranging morning. I think that we have certainly  
21 had a lot of interesting information and we really revealed a lot of resources for the Department to draw  
22 upon.

23 We continue after lunch with a discussion of the emissions reductions -- emission  
24 reduction and sequestration and measuring. And if you would take the time, perhaps, to look at your  
25 agenda so you can be thinking about this before we return.

26 It's now almost ten minutes after 12. I'm going to give you a full hour for lunch. Before  
27 you go, please do this quickly. It's going to be hard to get back here in the span of an hour and we've got  
28 a lot of ground to cover still. In your packet there's a listing of restaurants in the area. For those of you  
29 who know this area, there's a whole string of restaurants one street up and to the left. And there's a  
30 Chili's across the street, there's a Seafood across the street, there are a bunch of little shops as well. So  
31 it's now ten minutes after 12. We expect to start back up at ten minutes -- no, let's say 15 minutes after  
32 one. And there's a buffet in the restaurant down the hall. It will not accommodate 100-plus people. So  
33 thanks for a good start and we'll see you back here at 1:15.

34 (Whereupon, at 12:10 p.m., the meeting was recessed, to reconvene at 1:15 p.m., this  
35 same day, Monday, November 18, 2002.)  
36

AFTERNOON SESSION

1:30 p.m.

FACILITATOR BROOKMAN: Let's get started again. Those of you that are here, did you eat? I hope so. We'll tend to work you hard this afternoon. We're going to wait just a little bit, maybe five minutes.

(Pause.)

FACILITATOR BROOKMAN: Let's start. The next item on the agenda is to talk about the emission reductions and sequestration, characterizing and measuring. I hope we can talk about characterizing first before we talk about measuring. And you can see up here on the board, the kind of over-arching questions are: what are the characteristics of creditable emission reductions and what methods should be used to produce creditable estimates for such reductions?

Before we do that, however, the issue this morning was raised about legal authority. Jim Connaughton of CEQ addressed that issue. We thought we'd just take that up now, hopefully in fairly short form, and talk about that issue a little bit and I wanted to queue Margot Anderson -- yes -- Margot Anderson to address the issue of legal authority.

MS. ANDERSON: I really want to reiterate what Jim Connaughton mentioned this morning. What we're here to do is come up with recommendations and proposal to revise the guidelines to meet the primary objectives of the President. One, to improve the accuracy, reliability and verifiability of the registry and to protect against future climate policy and transferable credits for those that are registering real reductions.

We don't know what we're going to propose yet, and so we want to make sure that we have a good sense of what we're going to propose before we worry too deeply about the legal authority to meet that proposal. So we want to focus our work here for the next couple days and at the subsequent workshops on really what we think might ultimately find its way into that proposal. And at that point we need to consider whether we have the legal authorities that we need in order to put that proposal forward, or whether we need additional legal authorities.

That doesn't mean we're not anxious to hear from you on what you think our legal authorities are. Several have already written in to tell us what they think our legal authorities are and those comments are on our web page, and we invited you to take a look at those. If you want to comment on the two that are in there, please do so. Send us additional comments. We'll probably have a bit more of this discussion tomorrow when we talk about managing the registry. But we really want to focus on what we need to do in order to get the President's business done and have a discussion about legal authority once we have a proposal.

So I hope that helps. I don't want to cut off conversation in the area, but I also want to make sure that we're not putting the cart before the horse.

FACILITATOR BROOKMAN: Okay, I guess we can entertain very brief comments from anybody who wishes to follow-on. And I don't see any at this time. Okay, I suspect we'll get into a little more of it tomorrow.

Let's go to the next slide. I'm hoping we can talk about characteristics -- a whole set of characteristics of creditable -- that's the key word -- characteristics of creditable reductions, before we ever talk about the calculation methods that follow. Here you see a whole list of prompts for your discussion, the starting point being the directive that came from the President -- accurate, reliable, and verifiable, independent of changes in output, independent of temporary changes in weather capacity utilization, results from actions of the entity being credited outside public boundaries, outside US, double counting -- we've already referenced some of these issues, but they get more specific now -- reductions resulting from new investments versus improved management mandated by government regulation or voluntary, subsidized. Next, entity-wide reductions or project/plant-specific reductions, product manufacturers versus end users, and actions that displace/ avoid issues.

We have a graphic -- I'm going to ask Mark Friedrichs to take that.

MR. FRIEDRICHS: The first issue in that list is whether or not we should try to be

1 identifying emission reductions that are independent of changes in output. And it's come up during the  
 2 morning. It [inaudible] the use of emissions intensity factors. I just wanted to briefly describe the  
 3 problem that we see, and the problem is particularly great in the US widget manufacturing sector, where  
 4 we have three different companies that have very different growth and emission intensity profiles. The  
 5 industry is being dominated by Acme Widget which is growing rapidly over the reporting period, let's say  
 6 from 2000 to 2012. As you can see, it's production is going way up. It's emissions are going up but not  
 7 nearly as fast. And the reason is that it's taking a lot of investment in new technology, so its average  
 8 emission per widget is going down.

9 Unfortunately, we have a sort of sickly part of the industry, Dudley Widget that is losing  
 10 market share, it's production is declining. It's not making much investment in technology and its  
 11 emissions are climbing significantly.

12 So, we also have the third sort of middle of the road company that isn't gaining or losing  
 13 share. Its production is staying pretty level. It's making some investments, its average emission per  
 14 widget is a little down as are its total emissions -- pretty much in line.

15 So we're trying to figure out how we can equitably treat these companies in a program of  
 16 recognizing real or creditable emission reductions, and that's what we want.

17 FACILITATOR BROOKMAN: Okay, so independent of changes in output -- to achieve  
 18 accurate and reliable and verifiable. Mary.

19 MS. QUILLIAN: Mary Quillian with Nuclear Energy Institute. I think that before you  
 20 get into the specifics is that we would very much like to see in the Department of Energy's revision  
 21 expressly define what counts as a reduction. And it is our opinion that you have to include every project  
 22 that reduces, avoid, sequesters, or offsets emissions. And this is the only way that you will get all the  
 23 innovative type projects and the economic projects for actually, fundamentally reducing carbon dioxide  
 24 emissions or greenhouse gas emissions. I can talk a little bit more about how you calculate emissions  
 25 that can be attributed from avoided sources when we get there. But I think it's very important, and it's  
 26 important because it also goes towards who gets the credit for the actual reduction. And so if the  
 27 different types of reductions are not expressly defined somewhere, then you may get into an argument  
 28 later over who owns the credit that was earned.

29 FACILITATOR BROOKMAN: You said four of them: reduces, avoids, sequesters and?

30 MS. QUILLIAN: And offsets.

31 FACILITATOR BROOKMAN: And offsets. Thank you. Thanks for kicking that off.  
 32 Yes.

33 MS. EATON: Rebecca Eaton, WWF. I just wanted to say that I think first to bear how  
 34 important it is, instead of focusing on the emissions reductions, having really solid accounting guidelines  
 35 in place for emissions. Because then, if you have entity-wide emissions reported over a period of years,  
 36 the companies that are reducing their emissions that will be apparent in their overall inventory as it shifts  
 37 downwards and they are decreasing over time, or increase. But concern about having it very focused  
 38 simply on emission reduction projects that a company could be logging a number of projects its investing  
 39 in that may look like the company's actually reducing emissions when you tally the projects, when in  
 40 actuality that corporate-wide emission profile is increasing over time. So I think there's a lot of  
 41 opportunity for misleading information if emission reductions are [inaudible] to be logged.

42 FACILITATOR BROOKMAN: Mary to follow on, and then I'll go to Marlow.

43 MS. QUILLIAN: But the problem with just having a system that records actual  
 44 emissions is that you could actually have a company that doesn't have any emissions, and is actually  
 45 doing things out there that fundamentally and physically reduce the emissions that might come from  
 46 other companies. And if you don't have a way to recognize that, you are not incentivizing companies to  
 47 go into the business of reducing CO<sub>2</sub> emissions.

48 FACILITATOR BROOKMAN: I see several people want to follow on. Marlow, was  
 49 yours a following comment to this? Please.

50 MR. LEWIS: Marlow Lewis again with CEI. If you look at the President's statement of

February 14th, what he emphasizes is that these credits should be applicable to a future climate policy, that they would protect a company under a future climate policy. One of those is the Kyoto Protocol, and the Kyoto Protocol doesn't take into account changes in output at all. In fact, under the Kyoto Protocol, Russia has a surplus of credit because its economy has collapsed. So my question would be, how can you make a crediting system compatible with Kyoto, which is at least the likeliest of the international policies that are out there, if Kyoto takes no account of output, if the crediting system that your building adjusts for output, how do those two crediting schemes mesh? I don't see how it's possible. Maybe someone else does.

MR. LYON: Tom Lyon, RFM. I just want to point out that a cap and trade system makes all of this stuff much, much simpler. You can have a company which currently has no emissions, who sees opportunities to make improvements somewhere which could then somewhere trade in emission credits. And everything would work fine. It's the unwillingness to use a cap and trade system that makes it necessary to go to a very complex, difficult to verify system of reductions accounting.

FACILITATOR BROOKMAN: Thank you. Others? Yes, Civi.

MS. JAMARAYAN: Civi Jamarayan, ... Public Service. We have a slightly different problem than many of the others. For example, we have a rapidly growing system because of the population growth in southwestern US, and we have an obligation to provide them electricity, therefore we have to generate more electric power. So our overall tons are -- emission tons are rising, and that is why we like the President's proposal to have a measurement of carbon intensity, thereby we can rule efficiency or change fuels to some extent, and meet the carbon intensity goals, but at the same time we may not be able to meet the total tonnage or reduce actual tons.

FACILITATOR BROOKMAN: Okay, thank you. Yes, please.

MR. RAPPAPORT: Aaron Rappaport, Union of Concerned Scientists. One question that perhaps is not caught in this list of questions is independent of changes of input. To give two examples. An electric utility can switch from a coal-fired power plant to a nuclear power plant and it seems that if you're just doing entity-wide reporting, you don't catch CO<sub>2</sub> emissions associated with processing the fuel. Give another example. A hypothetical manufacturer could begin to manufacture a product that was more aluminum intensive, but to buy the aluminum from someone else who doesn't necessarily have to report -- he's not reporting into the system, and therefore -- I mean to be very hypothetical, let's say a boat manufacturer switches from making wooden boats to aluminum boats. The aluminum manufacturer chooses not to participate in the system because it's voluntary, and thus increases in emissions because of that choice of switching materials are not caught. And I'm curious as to how that can be incorporated in a voluntary system. I don't see how it can.

FACILITATOR BROOKMAN: Okay, thank you. Lee Anne is next.

MS. KOZAK: Lee Anne Kozak, Southern Company. I wanted to respond to the point that well, you could just look at entity emissions and what their path is over time to determine if there have been reductions or not. I would suggest that you cannot look at those emissions any more than you can look at project emissions. Entities change over time. You have shifts in market share. You have asset acquisition. You've got asset divestiture. You've got changes in product mixes. There's a whole variety of changes that take place in that entity, and whether their emissions are going up or going down says nothing about what's really going on and if there's a any "real creditable" emissions. You've got leakage, you've got all sorts of other issues. So looking at the entity level does not help you any more than looking at the project level.

FACILITATOR BROOKMAN: Do you have a way to address those issues?

MS. KOZAK: I'm not sure there is an easy way to address those.

FACILITATOR BROOKMAN: Okay, I saw this gentleman first, and then here and then here and then there. Yes, please.

MR. SKERNOLIS: Ed Skernolis with Waste Management. Just a comment about the entire list. One of the problems I have in looking through much of the background material and many of the issues as they are articulated, and much of the discussion, is understandably focused on things like

1 electricity production. But even when you talk about industrial production in terms of output, we also  
2 have to remember that there's a large -- large entities out here that are in the service arena, and some of  
3 these terms, some of the language of this discussion tends to ignore the kinds of opportunities and issues  
4 that are raised by entities that provide services rather than produce products or electricity.

5 I would suggest that some of your future conferences that you not only have somebody  
6 who produces widgets, but somebody who delivers the mail -- the kinds of things that are also impacted  
7 by this and make sure the discussion brings in both kinds of entities.

8 FACILITATOR BROOKMAN: Thank you. Thanks very much. I think you were next?  
9 Pardon me, Carlos was. Yes. Thanks for helping me there.

10 MR. ALARCON: Carlos Alarcon, CO<sub>2</sub> Financial. I was just going to add that this basis  
11 for measuring intensity or emissions reductions would also be subject to accounting standards -- over two  
12 years or even ten years and could measure -- and would measure your corporation's performance many  
13 different ways.

14 FACILITATOR BROOKMAN: Yes, and then Janet.

15 MS. CUMMINS: I just wanted to do a quick follow on to the question or comments  
16 raised by Southern Company about adjusting a historic baseline on a dynamic basis. There are guidelines  
17 in the THG protocol about acquisition and divestiture activity. It will account for those with a historic  
18 baseline, and also, of course, if you have good accounting principles in place, they'll look at how you're  
19 track your direct and if this doesn't include indirect emissions, you can do a 12 month inventory, and in  
20 the next 12 months, using those same guidelines, do another 12 month inventory of your company and  
21 therefore look at it over time.

22 FACILITATOR BROOKMAN: I'm going to give you a chance to come back, Lee Anne.

23 MS. KOZAK: In those guidelines they do address treatment of acquisition and  
24 divestitures. They do not address issues like change in product mix, change of market share, other areas  
25 where there are leakage. And again, for particularly large companies, corporations that are doing a lot of  
26 acquisitions and divestitures, even at a relatively small level, to try and constantly adjust and constantly  
27 go back and adjust becomes a very, very unwieldy process.

28 FACILITATOR BROOKMAN: Thank you. Janet. Oh, Miriam, and then I'll get you.  
29 You're next.

30 MS. LEV-ON: Miriam Lev-on on behalf of the American Petroleum Institute. I wanted  
31 to use this opportunity of the characteristics of creditable reductions, but also cycle back to the primary  
32 goal that the President has outlined in his speech, which is to decrease the greenhouse gas intensity of the  
33 US economy by 18 percent. Which, in a way, makes us look at how the changes are made relative to  
34 output. And the EIA procedures right now, do not allow us to do this and there's no clear provisions. So  
35 I would encourage EIA to definitely have something like this in.

36 But having said that, with all the complexity of the different industries, each sector  
37 should be able to be in a position to define how they would measure their output, and not having maybe a  
38 global indexing for all the sectors, or for all the companies. And in going back to the example that was  
39 shown there about the widget manufacturing and how they might change, I would venture to say that  
40 maybe this tracking of the greenhouse gas intensity is not a probable good measure for comparing maybe  
41 different companies, but for a single company to track its emission reductions from year to year, to track  
42 its emission -- its reductions in emission in greenhouse gas intensity from year to year. It's a good tool,  
43 rather than just tracking overall emissions.

44 FACILITATOR BROOKMAN: Okay. Janet.

45 MS. RANGANATHAN: Janet Ranganathan, the World Resources Institute. I think  
46 Rebecca made some of the comment that I wanted to do that it is possible to deal with this issue of  
47 structural changes in the company and, in fact, it's actually easier to deal with that issue than it is to  
48 actually set a baseline for a project. Because a baseline for a project is what would have happened  
49 without the project, and that's intrinsically more difficult to do, and complicates things.

50 I will say though that the THG protocol is policy neutral. There's a methodology to

1 calculate your absolute emissions. You can use that for setting either absolute targets or rate based  
2 targets, or intensity targets. With my NGO hat on, I would of course argue for absolute targets because  
3 of course they guarantee a specific environmental outcome in terms of emissions into the atmosphere,  
4 which is why Kyoto Protocol focused on absolute emissions rather than rate-based emissions.

5 And I don't think it -- I mean, it's good to become more energy efficient, but at the end of  
6 the day, it's what emissions go into the atmosphere that really count.

7 FACILITATOR BROOKMAN: Thank you. Other -- yes, go ahead.

8 MR. CICIO: Paul Cicio, Industrial Energy Consumers. The subject of credible  
9 reductions is a real dilemma for industrial consumers because if a company is successful in producing  
10 more widgets, it's going to consume more energy and when we address credible reductions, we're really  
11 talking about absolute reductions. That's what's really on the table. And the ability for most, not all, but  
12 most industrial consumers to reduce in absolute terms, is very improbable if they are successful in the  
13 marketplace. And frankly, I think the US economy at large, we want them to be successful at producing  
14 more product, using more -- yes, they use more energy. And so the likelihood of getting an absolute  
15 reduction in credible one, is quite low.

16 FACILITATOR BROOKMAN: So from that perspective, then you support a intensity  
17 measure?

18 MR. CICIO: Yes, for the President's program. It's calling for an intensity measure and  
19 manufacturing --

20 FACILITATOR BROOKMAN: It just seems as though intensity measures -- they all  
21 cite a host of problems here, if you could do it.

22 MR. CICIO: But the subject is creditable. If creditable means absolute tons -- and that's  
23 what's in the back of everybody's mind here when you talk about creditable. It's not intensity, it's  
24 absolute. And we have to flush that out and be very clear about what we're talking about. When we talk  
25 about creditable, you're talking about absolutes -- greenhouse gas intensity.

26 FACILITATOR BROOKMAN: Okay. Yes, please.

27 MR. PALMISSANO: This is a question about words. My name's John Palmissano. Is  
28 the word credible or creditable? You said earlier creditable, which means the ability to get a credit, --

29 FACILITATOR BROOKMAN: Uh-huh.

30 MR. PALMISSANO: -- which opens up a whole series of questions about credits. Or is  
31 what we are talking about credible -- like something's incredible -- or credible.

32 FACILITATOR BROOKMAN: Yeah. I think we're using the words interchangeably.

33 MR. PALMISSANO: So what do you want to talk about?

34 FACILITATOR BROOKMAN: Let me seek clarification. Margot Anderson.

35 MS. ANDERSON: We have been using them interchangeably, which isn't such a great  
36 idea. But credible reductions is the broadest universe, of which there may be reductions which are  
37 creditable. So I think that the credibility issue is one of accuracy, reliability, transparency, verifiability  
38 issue, and of that set, one would hope that there are a good number of reductions, then, that are  
39 creditable. So we're not trying to be confusing with this, we're trying to use in our lexicon that there's  
40 credibility issues and there's creditability issues associated with emissions reductions. What we're trying  
41 to avoid is the word real, because that opens up a whole other universe of what is a real reduction. But  
42 we're trying to get at precisely what the President said, you get credits for real reductions. And we think  
43 we would tie real back to the issues of reliability, accuracy and verifiability, and that's the universe from  
44 which we pick those emissions that would be getting a transferable credit.

45 FACILITATOR BROOKMAN: And I think in the annotated agenda, this section reads -  
46 - if I can just point it out -- characteristics of creditable reductions, so that may be a typo, but -- Bob.

47 MR. STREITER: No, I think it was a purposeful shift.

48 FACILITATOR BROOKMAN: Thanks for that clarification. I'll go to Brad first and  
49 then I'll return to Janet.

50 MR. HOLLOMON: Brad Hollomon, Pacific Northwest National Lab. One of the things



that may be useful, although it's not necessarily going to work any better, it's the UN [inaudible] on climate change [inaudible] absolute nor was it in terms of intensities. What they did was they required project developers to have a baseline, that is to say a forecast with a particular measure in place and then to forecast a new projection of carbon emissions with the measure in place. They then allowed that forecast to change, and that change could be based, for example, on increased output of the factory involved. It could have to do with the numbers of degree days of temperature, or something of that sort, that reflected the reality as opposed to the forecast in advance. It's not easy to do it that way either, but it was a different approach.

FACILITATOR BROOKMAN: Okay, Janet.

MS. RANGANATHAN: Janet, WRI. I think that there is a really important issue before us and that is whether we're going -- if we go the intensity route, are we going to credit reductions that were going to happen anyway? This is a business as usual. Because the US economy is becoming less greenhouse gas intensive in some sectors. So the question is, if there is an emissions reduction, does that automatically get credit?

FACILITATOR BROOKMAN: No.

MS. RANGANATHAN: Or do we actually have to screen out some of the reductions that were going to happen anyway? That's very difficult to do.

FACILITATOR BROOKMAN: They would be independent of capacity and weather. Is that your point?

MS. RANGANATHAN: Yes, I think some of them are.

FACILITATOR BROOKMAN: They would be -- all of industry X is going from one fuel source to another fuel source because that's the way industry is going. If that's a business as usual case, that shouldn't be counted.

MS. RANGANATHAN: That's what I'm posing is the question here. It's a difficult question to answer. It depends on where you come philosophically on this.

FACILITATOR BROOKMAN: Okay. Yes, sir.

MR. LEWIS: This is to follow up on the comment that was just made. Marlow Lewis, with CEI. There -- it seems to me there are two climate policies on the table to which credits might apply. One is Kyoto and the other is the Jeffers' multipollutant bill. And neither of them takes into account, at all, business as usual or additionality. I mean a country has an emissions target and it simply has to meet it. And what it can't meet it can then buy in an international credit trading market. And so I return to my previous question, which is, if this crediting scheme that we're all talking about here today is to provide some kind of baseline protection against say, Kyoto or Jeffers' bill, doesn't it have to mesh with the emissions trading regimes that would be established by those policy initiatives? And so I don't see how you can have -- I don't see how a crediting plan can provide baseline protection against what's actually up there in the political world, if it makes adjustments for output or if it requires -- or if it -- or, it certainly wouldn't, if it precluded companies from reaping windfall profits for anyway tons -- so again, to me -- I'm just confused as to how you make these -- you make one type of crediting scheme mesh with another.

And it seems to me that the President's goal is an intensity goal. When he talked about real reductions, he was talking about tons, and there is a disjunction there, if you will, an internal conflict that I don't think has been satisfactorily explained, or explained away.

FACILITATOR BROOKMAN: Well, let me press you on the issue of additionality. You raised the word, and I think it's a word that many of -- I fear it's a word that people don't have a shared definition for. So why don't you start with one?

MR. LEWIS: Okay. And I don't know if this is going to be technically kosher, but it seems to me that it's a reduction that somebody makes above and beyond what would happen in the normal course of events. It's a specific targeted investment. And I know that many in the environmental community think that that should be a criterion for credits.

But my understanding of Kyoto is that Kyoto is really indifferent to that, and that's why a

country like Russia, for example, can earn millions of dollars in credits just by having a bankrupt economy. It's not that they made any specific environmental investment to reduce their own emissions, it's because they were economically incompetent. So Kyoto would not prevent windfall profits for anyway tons, but on the other hand, Kyoto would not give a credit for intensity reduction which was accompanied by an aggregate emissions increase.

And so -- you know there seems to be a split personality here. Are the credits to be awarded for real, i.e., tonnage reductions, or for intensity reductions that might be accompanied by overall emission increases?

FACILITATOR BROOKMAN: Thank you. I think we're slowly working our way towards addressing many of these bullets simultaneously on the chart, which is -- that works to me fine. I just want to make sure they all get covered. Bill Fang and then Brad Hollomon and then Kristin next. Yes.

I captured your definition of additionality more than business as usual -- that was my contribution. A reduction above and beyond level base case, level business case based on investments, something like that. Okay, yes.

MR. FANG: Bill Fang with the Edison Electric Institute. I'd like to bring the discussion back to where it should be grounded, which is 1605(b). Under the statute a ton is a ton, again, as Mary Quillian pointed out, whether it's a reduction, avoidance or sequestration. Under the three examples that Mark Friedrichs put up, there's something to be recognized and credited under all three of those examples, because after all, emissions per widget is declining, or emissions is declining or both emissions per widget and emissions is declining.

Under the statute, motivation doesn't matter. Plant facilities and closings are specifically recognized in the statute. So there is something to be gained from all this, I think.

FACILITATOR BROOKMAN: Yes, I'm scanning the rest of the room -- restacking the queue.

MR. HOLLOMON: I was just going to add on on the subject of fuel and protocol, there are a couple ways to look at it. One of them is to look at the limits that are established under that. The other one is to look at the project based activities are established under the framework convention, which actually work quite differently and probably somewhat more analogous to what it is that we're trying to do here, since they're -- in some ways, they're not wall to wall. They related to particular project, particular measures, and they -- so they don't have the same kind of difficulties that you were talking about, about whether or not they can be attached to some kind of intensity or baseline measure of any kind.

FACILITATOR BROOKMAN: Thank you. I'm going to thank everybody right now because everybody's being real focused and succinct in their comments, and it's very useful. Thank you. Go ahead.

PARTICIPANT: I'm going to comment on creditable rather than credible. To me, a creditable reduction means that you reduce relative to what your obligations are. In the current situation, we don't know what people's obligations are. The gentleman from CEI mentioned a couple of possible policy regimes that might define these obligations, but there's actually a much larger universe of possible policy regimes that we might be under in the future. So I think what this exercise has to be about is providing enough information so that under a future policy regime, one could figure out what you did, compared to what your obligations are going to be. And I think things like verification, accurate data, reliable data will be useful, as well as information on many of these other fronts. So the energy intensity information will be useful, the verification of absolute reduction will be useful. But I don't think that we can make a decision about what will be creditable until we know what policy regime we're going to be under.

FACILITATOR BROOKMAN: And of course the challenge here is we don't know where that's going yet. You're first. Do you wish to try to focus a little more on the bottom half of the list. And particularly I'd like to go to mandated versus voluntary next. Please. What about that? What

1 about that? What about the issue of mandated by government regulation or voluntary -- and also the  
2 issue of subsidized?

3 MR. CASHIN: Mike Cashin. Maybe to go back to the graphics we had before might be  
4 a good start on this. If you take a look at the two widget companies, one that had an intensity that was  
5 increasing because it made more widgets, and the one that was getting worse because it made less  
6 widgets. And in effect, if you superimposed them and there was the same amount of widgets going into  
7 the market, it would be a wash. One would be a beneficial, and one a negative. So you're really seeing a  
8 change in market force and production, where plants are located and that type of thing.

9 As an intro, whether it should be mandatory or voluntary, you're essentially creating a  
10 dynamic where you would be -- if it's mandatory, creating tranquils (ph) and dynamics.

11 FACILITATOR BROOKMAN: And then those scenarios, what I thought largely, as  
12 Mark described them, based on new investment and new management.

13 MR. CASHIN: But if you put in -- I think he used the example of you're investing in the  
14 production line so you're more efficient, essentially then you're displacing market share so the other  
15 entity is still producing, but they're working back on the efficiency curve so system-wide, it's a wash. But  
16 it's separate ownership. And there are issues until which point you get an entity-based [inaudible] placed  
17 in the market, you don't really gain your unique tonnage.

18 FACILITATOR BROOKMAN: Mark's first. I left you out Kristin, I'll return to you.  
19 Mark, go ahead.

20 MR. WHITENTON: Mark Whitenon, National Association of Manufacturers. I would  
21 argue strongly for a ton is a ton, and using sort of the thermal -- we should pick the simplest form for this  
22 and once we get into what was mandated, what was the intent of the investor, we're just at a labyrinth. In  
23 addition, as far as business as usual is concerned, you start calculating that in, our business as usual is a  
24 three to five percent growth.

25 FACILITATOR BROOKMAN: Thank you. Kristin, I let you off, I'll let you rejoin  
26 whenever you wish.

27 MS. ZIMMERMAN: Okay, Kristin Zimmerman, GM. A comment on voluntary versus  
28 mandatory or mandated. Of course many of us are here to support that whatever we do is under a  
29 voluntary path or umbrella. And we've proved that it works.

30 Now on the issue of absolute versus intensity, I think we can show the progress of this  
31 1605(b) registry by showing intensity, by showing the reduction in intensity.

32 Now back to the multi-tiered registry idea. If, indeed, certain reporting companies or  
33 entities want to do the transfer bit, they deal with absolutes with a third party. One on one, between a  
34 company and a third party. That's for them to handle under what I would call credible guidelines for  
35 reporting -- your accurate, reliable, verifiable.

36 FACILITATOR BROOKMAN: Okay, who next? Yes.

37 MS. EATON: Rebecca Eaton, WWF. Just wanted to say I think that -- I'm not sure  
38 about you all, but the last decade's worth of reporting under the 1605(b) program didn't seem to develop  
39 that much useful information in terms of informing a future-oriented, nation-wide, comprehensive  
40 climate management strategy. And that was a voluntary program. I know that previous administrations  
41 there was the EPA Climate Wise program, there was the climate challenge program, urging utility  
42 companies to reduce emissions. Over 500 companies participated in the Climate Wise program, urging  
43 companies to report their emissions voluntarily in 1605(b), and what we know is the country's emissions  
44 significantly increased under the face of those voluntary programs.

45 I think mandatory reporting is clearly the only way that this country's going to reduce its  
46 emissions.

47 FACILITATOR BROOKMAN: You want to clarify? Use the microphone.

48 MS. ANDERSON: As we all said, I think, at the top, we're here to talk about a voluntary  
49 program and it is a voluntary reporting program. This particular bullet is getting at an issue -- there  
50 seemed to be a lot of concern when people wrote in to us and their public comments, which is, do you

count emissions or emissions reductions if they are already being caused by a government regulation. Will you count emissions or emissions reductions if they are already being -- if that activity is already being subsidized by federal or state governments? This isn't an issue of whether the program should or should not be mandatory or voluntary. It is a voluntary program. But this is about what happens when actions are caused by other government actions. And there may be -- some might characterize it as double dipping, of counting reductions that are caused by regulations. So that's really the clarification.

FACILITATOR BROOKMAN: Ed, you're first, then Miriam, and then Bill.

MR. SKERNOLIS: Ed Skernolis with Waste Management. I think the way Margot's framed the question is really a policy question, and not a technical question. You should count everything. What you credit is going to be, I think, subject to the multi-tiered process we talked about earlier. And a ton is a ton as the gentleman said. And the environment doesn't care. Who will care is the market place in terms of what has value in the market place.

FACILITATOR BROOKMAN: Miriam, and then to Bill. You're on.

MS. LEV-ON: Miriam Lev-on on behalf of API. I want to bring here two points, basically to try to expand or to get back to Margot Anderson's on the fact that it's voluntary. And if you are considering if emissions are reduced or maybe even increased because of regulatory activities, that's again, as was said, is a policy issues because the same way as emissions might be -- there might be regulatory activities that relate, for example, to comply with the Clean Air Act where you put in NOX control, and those NOX controls can reduce greenhouse gas emissions, but they can also increase greenhouse gas emissions, depending on what you chose to be your -- the way that you are complying with this NOX emissions. So that's something that is policy and not so much an emissions reduction or increase.

But there should be considerations where the emission reductions that happen, even if you've done a regulatory program, like again, say, the Clean Air Act program for VOCs, for example, but then those VOCs program also reduce methane, and methane is a greenhouse gas, would you get credit for the methane reduction?

FACILITATOR BROOKMAN: Mark, a follow up comment?

MR. FRIEDRICHS: Just a clarification about the widget sector example. What we're trying to ask is what kinds of emissions in that kind of situation should be credited? The suggestion was made that perhaps both those emission reductions associated with the decline in production of one company as well as the emission reduction associated with the declines in emission intensity should be recognized. If you did, in that particular sector, you would be recognizing emission reduction that actually far exceeded the actual reductions that were being achieved in the sector as a whole. So it's -- because there is a shift in this particular case, of market share, and how we accommodate that -- I guess I want to try to bring back comments to the overall question which we're trying to get here, and that is, is if we're going to recognize emission reductions, what do we want to try to recognize in an ideal situation, and to hear comments about what kinds of emission reductions people think you should deserve credit for. What kind of reductions deserve credit?

FACILITATOR BROOKMAN: Bill, you're next in the queue, and then I'll go to you.

MR. TOWNSEND: Three comments. First to respond to Margot Anderson's question. This is not a policy issue, it's a purely legal issue. The statute indicates, as I had pointed out before, plants and facility closings are recognized, just as are voluntary reductions, and state or federal requirements -- any reductions in greenhouse gas emissions achieved as a result of state or federal requirements. So it's clear that you could report reductions, even if they were mandated, as the slide indicates, by a federal regulation or a state regulation.

With respect to the WWF comment, I believe -- we believe the 1605(b) database has produced a lot of useful information -- that's -- I think that's indisputable. The real question is how much of that, in terms of past reports, should be creditable, and that's something that will have to undergo the revised guidelines and perhaps a screen or filter or something to try and capture how much of that is creditable.

1 And finally, with respect to Mark Friedrichs question which he just raised, the statute  
2 again indicates and lists a number of different kinds of reductions and other activities and should be the  
3 starting point for what kind of activities should be recognized.

4 FACILITATOR BROOKMAN: A lot of people have shown me they wish to speak. I  
5 saw you first, and then I saw Janet, and then I'll go to Paul. And then I'll sweep back this way. If we can  
6 be very brief. Yes. Okay, Janet.

7 MS. RANGANATHAN: Janet, WRI, just briefly. If you were going to develop intensity  
8 methods for giving credits, you will need the absolute emissions to be able to do that. You cannot  
9 calculate intensity indicators without that. And for transparency reasons, it should be reported. Which  
10 then reveals what the outcome, or the measured outcome would be, which will create confidential  
11 business problems, I suspect.

12 And then thirdly, in relation to the comment by Mark about keeping it simple, it is very  
13 difficult, other than a few sectors like the electricity industry, to come up with a single measure of output  
14 for industry. Several organizations, including WBCSD, the National Roundtable on Environment  
15 Economy, are trying to do this on an industry by industry basis, and it is very difficult. It is likely for  
16 some companies, particularly diverse holding companies, that they would need a multitude of different  
17 kinds of outcomes to truly reflect what's happening. And it gets complicated very quickly.

18 FACILITATOR BROOKMAN: Okay.

19 MR. CICIO: Paul Cicio, Industrial Energy Consumers. The 1605(b) has been an  
20 incredible source of information for any company who has not taken action to control their greenhouse  
21 gas emissions. I think you would benefit by looking at the wealth of learning information that is in there.

22 And second comment. Most everything should count, but we do have one exception, and  
23 that is that if you are shutting down a plant, that you shouldn't get credit for that. It should be a -- that is  
24 not a credible reduction, that should come out of your baseline.

25 FACILITATOR BROOKMAN: Okay, who did I see? Yes. First you, and then you.

26 MR. HOLDSWORTH: Eric Holdsworth with Edison Electric Institute. I just wanted to  
27 get back to a point that was raised about the voluntary 1605(b) program had not led to reductions in  
28 emissions, and was therefore, perhaps, not a feasible reduction program. I'll just note that many nations  
29 have ratified the Kyoto protocols and have not reduced their emissions, so there are different ways at  
30 getting at that issue.

31 FACILITATOR BROOKMAN: Thank you.

32 MR. BARBOUR: Wiley Barbour with ERT. Just a quick point. I think one of the  
33 fundamental functions of a registry is to act as sort of a gatekeeper to data, to screen through various  
34 claims, to identify those that meet the criteria of that registry and those that don't. It was asserted earlier  
35 that a ton is a ton is a ton, but really that's a goal not a truism in itself. It's the job of the registry to verify  
36 that. And so if we -- as we go around the room, we have a lot of different definitions of what's a  
37 reduction and I don't know if we'll ever come to an agreement, but it seems that you could agree that the  
38 registry could very transparently distinguish between avoided emissions, actual emission reductions from  
39 a historic point in time, and emission reductions calculated on the basis of intensity improvements. I  
40 have a feeling that in the marketplace, for verified emission reductions, you'll find that there is a  
41 distinction that people will want to distinguish between those two tons. And it's the aggregate direct  
42 emission reductions that have the highest value.

43 FACILITATOR BROOKMAN: Thank you. That was a clarifying comment. Thank  
44 you. Yes, Marlow.

45 MR. LEWIS: Marlow Lewis, CEI. Just to follow up on the remark that the gentleman  
46 over here from Edison said about 1605(b) and how it allows reporting for reductions that take place as a  
47 result of state policy mandates. 1605(b) was the replacement for language that was originally in HR776  
48 drafter by Congressman Jim Cooper, and that was to be a crediting program. And the language in that  
49 original 1605 -- it was actually 1605(a) in the House version, which the conferees rejected -- made it very  
50 clear that no credits would be given for reductions otherwise mandated by this law or other laws. And

1 Senator Lieberman prepared an amendment very similar to the Cooper legislation -- anyway, I'm just  
2 saying that it's interesting, 1605(b) does not restrict what you can report, the cause of the emission, but  
3 the legislation that it was developed from, which had a crediting provision, did restrict -- did make those  
4 restrictions.

5 FACILITATOR BROOKMAN: And I'm not sure how much the legislative history of all  
6 this serves us at this very moment, but I do know that the President has four agencies kind of on the hook,  
7 worried about transferable credits.

8 I'm going to let EIA come on and then I'll go to David. Did I leave anybody out yet?  
9 Then I'll come to you after David.

10 MR. McARDLE: Just for -- Paul McArdle, EIA. Just for a point of reference, a lot of  
11 discussion is going on around the plant closing issue and the regulatory issue and how many tons from  
12 that area. Just to give you a feel for it, about seven percent of all the tons reported to the registry, at least  
13 the last time we ran those numbers, came via plant closings and regulatory action. The other 93 percent  
14 are classified under another box in the form, and that's voluntary actions.

15 FACILITATOR BROOKMAN: Thank you. And this notion about different kinds of  
16 reductions -- that was a useful contribution. David.

17 MR. FINNEGAN: I just want to reiterate the point is that the statute does provide for  
18 reporting reductions to any measures, and it includes a list, but what we're including is not a limitation.  
19 Secondly, it does provide for plant or facility closings as well for reductions.

20 Lastly, as far as the legislative issue, EEI has filed comments on it that they differ from  
21 the other comments.

22 FACILITATOR BROOKMAN: Thank you. And I guess at some level it is very useful  
23 to say what the legislative content is as we look forward to going from there. Other comments on the list.  
24 I am wondering if we, at this point, covered the elements that are there? Net entity-wide reductions?  
25 Plant-specific reductions? Product manufacturers versus end users? Emissions reductions? Actions that  
26 displace or avoid issues? Yes, David. You know what, David, I left you out. You go next.

27 MR. FINNEGAN: Thank you. I'm going to talk about the entity versus project question.  
28 And as a little bit of background --

29 FACILITATOR BROOKMAN: We heard already one person say that if you're going to  
30 do this in a credible -- creditable way, I think was the word -- then you need to do it entity-wide. I think  
31 we heard that.

32 MR. FINNEGAN: I'm going to challenge that.

33 FACILITATOR BROOKMAN: Okay.

34 MR. FINNEGAN: Fortunately, nothing can be thrown in this room. And as a little bit of  
35 background, our company has developed -- actually with a couple companies in this room -- a number of  
36 project-based credits in the transportation industry, in [inaudible] sequestration for EOR. We've made  
37 investments in projects, not in entities, and we've created and sold about 15 million metric tons of those  
38 credits. All those were developed in the US, and all of them were sold outside the US, which is  
39 interesting in itself. Those have been registered on three different registries and they have been verified  
40 by third parties.

41 Now the characteristic, I think, that's important here is the double accounting or the  
42 viability of a project-based credit. The suggestion is that if you have a project-based credit, you can  
43 cherry pick, or you can double count, and so what you've got to do is create a project based credit that  
44 doesn't allow you to do either. And this is how we do that.

45 In a project based credit, the entities involved in the project based credit must give up  
46 their rights, once and for all time, any benefit or impairment associated with the project. They do that in  
47 the form of the document of the transaction, and they do that in the form of the buy/sell of the credit  
48 itself.

49 So, you know, be careful not to throw the baby out with the bathwater. I think that there  
50 are some entrepreneurial great concepts here in the US that allow for credits from a specific project --

1 and a number of industries -- and by the way, I would make an argument that in the indirect side there are  
2 some great, high quality credits in logistics transportation that, by ensuring that the stakeholders have  
3 given up rights, and given up conflicts of interest, and given up double accounting methods, that the  
4 quality of that credit can be grown substantially.

5 Now we've done this with people like Albertson's and Tysons in the food industry.  
6 We've done this with Kender-Morgan and Oxy and Denbarry Resources in the petroleum industry. So I  
7 think -- you know, I'm going to -- I'm a proponent that a project credit can stand alone if that project  
8 credit is not allowed to be double counted by the entities associated with that credit. It still has to meet,  
9 by the way, all the other issues too.

10 FACILITATOR BROOKMAN: And of course, double counting is one of the biggest  
11 issues -- your name is?

12 MR. TOWNSEND: Bill Townsend.

13 FACILITATOR BROOKMAN: For the record, that was Bill Townsend speaking a  
14 moment ago. Other issues that -- related to that specifically or any of the rest of the items on the list  
15 here? yes.

16 MR. JONES: Russell Jones with API. Speaking as an economist more than API. If the  
17 people who are going to be doing this program, in their ultimate wisdom, pick at least two of those  
18 things, we can guarantee you many of the people in this room will have difficulty in sorting out how their  
19 missions changed among these two or more factors. So, the more factors you pick, the more complicated  
20 the system's going to be.

21 FACILITATOR BROOKMAN: Thank you. Yes, David.

22 MR. DONIGER: Well, I think this whole discussion is illustrating what a quagmire  
23 project-based credit is. It makes a difference at the start, whether one is thinking about this as having  
24 first dibbs on the allowances in the future account, or expanding the future account. It should make a  
25 great difference whether one is thinking about this as being something of unlimited volume or limited  
26 volume. It should make a difference -- I don't really see it on this slide -- what baselines are going to be  
27 applied.

28 But this exercise is going to present DOE with an unlimited number of inconsistent  
29 demands, and I only feel for the people who have to try to sort this out. I think the best --

30 FACILITATOR BROOKMAN: I'm sure all four departments -- three departments and  
31 one agency welcome your empathy.

32 MR. DONIGER: I'm sure it's highly marketable. I think that one important way to  
33 resolve -- to move forward would be to move away from project-based accounting when one is talking  
34 about projects that are within entities, that otherwise are expected to report on their emissions. If you're  
35 an entity and expected to report entity-wide, then your progress in reducing emissions should show up in  
36 your entity-wide totals from year to year. And it would be a kind of double counting to allow companies  
37 to take individual projects out of the context of that entity-wide. There may be some room for projects  
38 accounting in activities that occur outside of any entity that's expected to report. So I would leave the  
39 door open for discussion of that.

40 FACILITATOR BROOKMAN: Go ahead, Ed, and then I'll allow you to follow on.

41 MR. SKERNOLIS: Ed Skernolis, Waste Management. I guess just to demonstrate the  
42 quagmires are in the eye of the beholder, I thought the conversation demonstrated difficulties in dealing  
43 with entity-wide emissions. But back to first principles. I don't think 1605(b), nor the President's  
44 program, suggest an entity-wide count on climate change gas emissions. Yet much of the conversation --  
45 when we talk about entity-wide -- seems to imply that we're working from some kind of voluntary count,  
46 and then comparing that against voluntary reductions. Those entity-wide emissions are going to go all  
47 over the place, depending on all the factors we talked about -- the GDP, market share, et cetera, et cetera.

48 Project emissions are very well controlled, very well documented, very easy to measure,  
49 and they produce real reductions that would otherwise not occur. And it seems to me clearly we should  
50 focus on that kind of activity. And you can have some reasonable relationship between what you

1 constitute as an entity and a project, but they should be close together or you're going to have great  
2 difficulty, I think, in getting people to first, participate, and then to come up with accurate numbers.

3 FACILITATOR BROOKMAN: And with the kind of clarity and documentableness that  
4 you referenced there, that they should end up being creditable?

5 MR. SKERNOLIS: Absolutely.

6 FACILITATOR BROOKMAN: You're next. You're all set. Miriam, did you want to  
7 get in here?

8 MS. LEV-ON: Just for a quick one. This is Miriam Lev-on. I just wanted to reiterate  
9 the issue of the data quality. In order to be able to have a credible or creditable emission reduction from  
10 a project basis, it's the data quality and the description of the activities that led to the project. And  
11 industry and DOE are also investing a lot of effort and money in developing new technologies that should  
12 be good candidates for getting credits for reductions.

13 And I'll just give one quick example, and this is the cap and capture and geologic  
14 sequestration, and we maybe talk about this a little bit later on.

15 FACILITATOR BROOKMAN: Thank you. Yes.

16 MR. STREITER: Bob Streiter, Aluminum Association. One thing that's come to my  
17 attention as we've been discussing is the fundamental difference between direct and indirect emissions,  
18 how credits might be generated as well as credible reductions. For example, if under WRI protocol we  
19 have indirect emissions, you're calculating a power plant. You may not have control over how those  
20 emissions are generated. They could fundamentally shift from, say, a nuclear plant to a coal plant. Even  
21 though you may reduced the intensity of energy by 20 percent, the overall emissions outside of your  
22 control have gone up. So I think it may be necessary for indirect emissions to have some kind  
23 of way of normalizing the data to some kind of baseline for establishing reductions.

24 FACILITATOR BROOKMAN: Thank you. Yes, please.

25 MR. STEADMAN: Gene Steadman with Celanese. I want to make two points. First, as  
26 far as the overall policy, what we're all reporting about. In my mind, at least, I don't think there's any  
27 question at all that the President's policy espouses intensity. So every time we talk about absolutes, it  
28 seems like we're wasting a lot of time and resources, and just focus on -- just stay focused on the purpose  
29 of the 1605(b) with the President's policy report on greenhouse gas intensity, which allows the economy  
30 to grow while actually reduces the rate of growth of emissions. That's the first point, at least from my  
31 perspective, from a corporate perspective.

32 The second is down at that next to the last bullet, talking about greenhouse gas intensity  
33 reporting. Product manufacturers versus end users. And I have a scenario that I'm very familiar with.  
34 We make fibers in one of our businesses. The fibers are woven into fabric by bigger companies who then  
35 sell that fabric to coaters who do a lot of work coating these fabrics, and the coaters sell it to a  
36 manufacturer who puts belts and straps on it, and they sell it to somebody who puts a tarp on an army  
37 vehicle.

38 My question of who is it that's going to report those greenhouse gas intensity  
39 measures along that value chain?

40 FACILITATOR BROOKMAN: Are you going to handle that question? Okay, we'll  
41 leave that question out there.

42 MS. BOURNE: Sandy Liddy, North American Legislative Exchange Council. I've been  
43 thinking as we've been talking about credible and creditable, and I look at that starting point -- accurate,  
44 reliable and verifiable, and the lady from the World Resources Institute talked about it's emissions that  
45 count. And I'm watching around the country a lot of litigation starting up on greenhouse gas emissions,  
46 and I go back to -- we still need that legal definition in order to assign a property right to get a credit, and  
47 until we get a legal, scientifically sound definition of polluting emission, or a polluting greenhouse gas  
48 emission, we're still sort of -- we're backing into this rather than starting out legitimately. I'm very  
49 uncomfortable with what we're doing because we're talking about a lot of money, a lot of effort, and not  
50 necessarily a lot of results at the end of the day.

FACILITATOR BROOKMAN: Thank you. Other comments on these slides? Is it



possible -- to my peril, I offer this. Is it possible for this registry to use something like a multi-tiered system that would encompass entity-wide reduction and project and plant-specific types of reduction? Is that something that could be arranged -- that whole spectrum -- in your view, be accommodated by industry? Yes, go ahead.

MR. WHITENTON: Mark Whinton. We would like to see two types -- we would like to see the flexibility of project registration, not for purposes of credibility or creditability, but for purposes of showing off and establishing best practices and issuing good design changes. And as far as the more creditable, sure, I think personally that should be an entity-wide under the various rules.

And a quick comment on who should get the credit -- the manufacturer or the end user? It's probably, generally speaking, the he or she who invests should get the benefit of that investment. So I invest in efficient capital equipment, then I should get that -- if there's a reduction, I should get credits for that.

FACILITATOR BROOKMAN: Okay, thanks. Did you wish to follow on? Okay. Any other comments on this? Yes.

MR. CASHIN: Mike Cashin. I just -- something that we're all aware of is that when it comes to assessing an activity, it all starts out with an energy and mass at some kind of activity level or project level. And as you build it up, if you want to talk about entity-wide, it's the composite or the compilation of these building blocks in bringing it to that point. So I think that to say that you would preclude being able to do one in favor of the other, is frightening people. If it works out well for your entity, then to do it entity-wide, that would be fine and if you can manage project level characterization, that should be allowed as well.

FACILITATOR BROOKMAN: And the value that would accrue to it, whether it would be creditable would depend on how credible you are with -- the nature of the data, how you capture it, all that sort of stuff. Alright, I see some heads nodding up and down. Any counter point to that, since I've noted that agreement. David.

MR. DONIGER: Just a caveat in that you need not only to be able to accurately measure what's going on in a project, but you have to have a credible basis for what the counter condition was. What would have happened anyway? And that's not a data question. That's going to be a mixed up question of policy. And that's not contrary to the slide. It maybe comes later.

FACILITATOR BROOKMAN: Okay, thank you. I'd like to go to the next slide, because I think we're there. Let me just say in about 15 or 20 minutes or so, we'll take a break, so for those of you who are hanging on, please do continue to do that.

Calculation methods. And you can see emissions -- changes in absolute emissions. We've already touched on some of these kind of implicitly, but now we want to talk about the specifics of the calculations. Units at baseline. Changes in absolute emissions. Emission-intensity baseline. Entity-wide or sub-entity projects? Calculated displaced emissions. Minimizing double accounting. Calculating dynamic baselines. Base years, starting when and average and multiyear reporting.

Would you bring up the previous slide? You will recall our starting point once again: accurate, reliable and verifiable. That's what we're looking for. Comments on this? Yes. Mary.

MS. QUILLIAN: Avoided emissions should be credible when you can show that they're accurate, reliable and verifiable.

FACILITATOR BROOKMAN: I want you to say what avoided emissions are.

MS. QUILLIAN: Yes, an avoided emission -- again, Mary Quillian -- avoided emissions in a case of a project like a wind farm or increased capacity at a nuclear plant, or solar -- an array of solar shells using electricity is avoiding emissions that might otherwise come from fossil fired generation later down the dispatch curve. And this is actually very measurable. If you look at a dispatch curve, the dispatch -- the electric -- I realized this is basically the electric industry, so I apologize for not knowing this in other industries, but if you look at the order of plants as they are dispatched, they are dispatched according to their economic operating costs, and the least costly operating cost plant is dispatched first, and in that order. And because fossil plants rely on fossil fuel which varies, their offering costs tend to

1 be larger than the wind farms and the nuclear units and the hydroelectric plants and the non-emitting  
2 sources.

3 So if you have a non-emitting source that either expands, or a new source, it tends to  
4 come very early on that dispatch curve, and it then adjusts all fossil -- or I should say all plants later in  
5 the dispatch curve get moved down, and you can actually show -- if you go back to your dispatcher, your  
6 independent operator, whoever is dispatching the plant, and figure out which plant would have run or  
7 which plants would have run at additional capacity to cover the megawatts that were produced by your  
8 project. Your avoiding project can actually show the emissions reduction.

9 FACILITATOR BROOKMAN: Thank you, yes, Brad and then to Bill.

10 MR. HOLLOMON: Brad Hollomon, PNL. I'd like to pick up on the last comment  
11 against frustration and challenge that comes out among other things in these projects in the last several  
12 years. I would agree that basically it's not difficult either to simulate, in the case of the utility what  
13 would happen with or without a wind project, or even for that matter, an end user reduction project. Nor  
14 is it possible to calculate in fact, what the impact of this project as time goes by. The difficulty is it's  
15 almost never done, and it seems to me that there is probably an opportunity for DOE or someone else to  
16 try to provide for that kind of analysis and simulation, particularly in the deregulated environment which  
17 I believe is somewhat more complicated. It's not one utility as one might find in the third world country  
18 which has its own set of power plants and its dispatch order. There is a market in place which has a  
19 certain kind of dynamism. But it would also not be impossible for the CO<sub>2</sub> information or greenhouse  
20 gas information to be passed through the independent service operator to a central location to be doing --

21 FACILITATOR BROOKMAN: And you say it's not being done presently because the  
22 tools don't exist and because people don't see any benefit of doing that analysis?

23 MR. HOLLOMON: I'm not quite sure why that is, maybe it's because the present  
24 1605(b) program has a convention that I believe says that you use the average carbon -- CO<sub>2</sub> intensity for  
25 electricity for the state in which it's actually being generated, which is not necessarily the state in which  
26 it's being used, particularly at the time of day that you're using it. Nor does it take into account capacity  
27 changes, capacity additions, and that kind of thing. But --

28 FACILITATOR BROOKMAN: If you could have a sight of that level of complexity,  
29 you're saying it's possible to do that.

30 MR. HOLLOMON: Because the utilities have to do this whole thing anyway.

31 FACILITATOR BROOKMAN: I saw Bill first, and then I saw this gentleman here.  
32 Yes.

33 MR. FANG: Bill Fang, Edison Electric Institute. I'd like to talk about emissions  
34 intensity for a couple of minutes, partially in response to an earlier WRI comment which suggested that  
35 there is only one emissions intensity metric for our industry, which is not true of course. First of all, we  
36 have the President's metric which is an emissions for GEP (ph). There is no directly applicable metric  
37 like that in the electric utility industry because electricity is embedded in products and services, so you  
38 don't have emissions per GEP in our sector.

39 What we have come up with, after thinking about this and doing some research. There is  
40 emissions per gross output. This is the Department of Commerce's measure, but we have to look at a  
41 couple of SIC codes. Gross output is indicated in terms of dollars, so it's about as close a proxy as we  
42 could find to emissions per GEP. There is also emissions per revenue, which of course is in dollars, and  
43 the relationship between emissions per revenue and emissions for gross output is very similar.

44 Then there is emissions per kilowatt hour, which a lot of people think is -- or some  
45 people may think is the only measure, but it is not, obviously. And finally, there's emissions per  
46 mmBTU. There could be some other emissions intensity metrics. We probably haven't thought of all of  
47 them. Just in our sector you can see there's at least four that are national and make some sense.

48 So what I think all of this argues for is flexibility. Reporters must have some flexibility  
49 in determining what their emissions intensity metrics are. There is not a single metric, for example, and  
50 that should be kept in mind.

1 FACILITATOR BROOKMAN: Thank you. Dennis. Yes.

2 MR. TOWNSEND: Bill Townsend with Blue Source. You have quite a few names  
3 here. Very good, though. I want to tie together the concept of -- this slide is about measurements and  
4 about determining the units of measurement and the means by which you do that. And the topic again is  
5 greenhouse gas intensity. But how does that apply to projects that may not produce something, that may  
6 start a period in time.

7 I think -- we're working on a project right now that ties two different industries together,  
8 and ties the uniqueness of a project with greenhouse gas intensity. And I might describe how we're doing  
9 that.

10 The project is being created in the food industry, and this entity for years kept their food  
11 cold or frozen with dry ice. They're converting a number of their facilities to liquid nitrogen. As a result,  
12 they are reducing the emissions associated with the evaporation of that dry ice. And it's sizeable. It's a  
13 quarter of a million tons a year of reductions in CO<sub>2</sub> after indirects.

14 Now, we're talking about a transaction, though, that takes that to a manufacturing  
15 industry which has a greenhouse gas intensity formula which has to do with the number of widgets that  
16 are produced by them. And what we're -- I think the tie that works here for the registry is that projects  
17 produce total tons. A ton, is a ton, is a ton. Whereas entities are really measured -- potentially measured  
18 more on intensity. And so the entity then that acquires the ton from the project, and the owners of the  
19 project must give up any rights to that, and their own baseline, but there's a tie there that brings projects  
20 and entities together on the acquisition of the emission reduction as it's tied to the production of the  
21 widgets intensity.

22 FACILITATOR BROOKMAN: Okay, thank you. Yes. Paul McArdle.

23 MR. McARDLE: Yes, Paul McArdle, EIA. Just a clarifying comment on the electricity  
24 emission factors that keep coming up. EIA calculates a three year annual average of emission factors by  
25 state and by region. And we supply those to our reporters. However, that is not what we generally  
26 recommend people use. Particularly in the case of electric utilities, they generally know what their  
27 emission factors are, they're calculated from their total fuel use. So generally, we get some sort of  
28 estimate of emission factors for the utility or something from their power pool in which they participate.  
29 And that generally affects direct emission reductions.

30 However, on the indirect side, that's where you get people using the surrogate emission  
31 factors that we calculate from the EIA data, and that's generally more used on -- for the indirect reporters  
32 for reducing electricity at the end use level. So I just wanted to throw that out as clarifying.

33 FACILITATOR BROOKMAN: Thank you. Yes. Marlow.

34 MR. LEWIS: Marlow Lewis, CEI. I want to follow up on the Nuclear Energy Institute's  
35 comment about avoided emissions. I read your comment and I don't quite remember the numbers, but I  
36 recall something like over the last ten years, using the 1987 and 1990 baseline of 1605(b), that your  
37 industry, or the utilities that you represent could collectively claim to have avoided about 2.8 billion tons.  
38 And that might not be the right amount, but it was huge. It was like 140 million tons a year.

39 If we were to give out one credit per ton, and if avoided emissions count as a full  
40 reduction, well, I think people can sort of figure out for themselves how this would transfer wealth.

41 FACILITATOR BROOKMAN: Mary Quillian.

42 MS. QUILLIAN: Mary Quillian, NEI. My point with this comment is there are a  
43 number of different ways to calculate tons avoided, and I will tell you that the way that we have been  
44 calculating tons avoided may differ depending on what we're reporting into. One can argue for a  
45 historical look back since the nuclear units started operating, that you can calculate tons avoided by just  
46 replacing it with a comparable fossil-fired unit that would have been built instead.

47 But I'm proposing that wherever you're going to start, you can actually look at what's  
48 being avoided in a particular year by -- and you know what -- I'm even going to say just upgrades -- the  
49 new megawatts of nuclear. I'm not even asking for what's existing. But I think that in all fairness, you  
50 need to give credit to any entity that invests in projects that avoid, reduce, or sequester greenhouse gas

emissions. And that's where we're coming from.

FACILITATOR BROOKMAN: David. I'm going to suggest we take a break here pretty quick. I can see you all slumping in your chairs. David.

MR. DONIGER: Just to note that this problem with the nuclear plants is the easiest illustration of the problem of anyway ties. I mean these capacity improvements, well motivated to occur without any goosebump in the 1605(b) system. It did occur since 1990 to a substantial degree, and it's just rate seeking to go back and seek credit in the bill or in this process for the upgrading that's already occurred and couldn't possibly have been motivated by a credit system that didn't exist yet.

FACILITATOR BROOKMAN: So in order to get credit, you need to be motivated to do something that exceeds your self interest or your business as usual case, David.

MR. DONIGER: There are many years of history in the evolution side in the credit programs that preceded the acid rain program, struggling with this. And I won't propose that motivation be a test because it's impossible to discern corporate motivations, even individual motivations. So I'm not saying that's the answer. I am saying that if one only looks at differences from the starting point to where we are now, and one is allowed to be selective about it, that one will rack up very, very large amounts of tonnage which any inspection will show most of which would have come anyway. And even if there is some question of that which was leveraged, that wouldn't have happened anyway, you can't find a rule to sort between that part and the base part. So I don't know how to find an administrable rule for baselines that works for the project level reporting.

FACILITATOR BROOKMAN: Did I see you? Your name for the record, please? And then after this comment we're going to go to break. Go ahead.

MS. SCHAFFER: Amy Schaffer, Weyerhaeuser Company. Certainly recognizing the concerns that David mentioned, there are a number of projects where industries, particularly the forest product industry, has avoided use of fossil fuel to remove the use of biomass energy, but there's a point at which the costs don't make sense, and therefore going beyond where we are today certainly would benefit by having additional incentives and therefore counting avoid emissions that Mary talked about would not just be for the electric power industry, certainly, but beyond that for other industries where co-generation and supplies of massed fuels has increased and would increase significantly with additional recognition.

FACILITATOR BROOKMAN: Thank you. I'm going to suggest we take a break. Let me queue this for you folks. As I looked at the list up here, I know the Department is seeking your specific advice on these points. We've already referenced many of them -- it seems much of the conversation has been kind of global, and they would like specifics if you can offer that. I know they would also appreciate specifics that help this capacity to kind of bridge between the many viewpoints which we've heard plenty of already in this half of this day.

So when we return from break, it's now 2:50 almost, come back at five minutes after three, specifics on this and we'll move on with the day. Thanks a lot.

(Whereupon, a 25 minute recess off the record was taken.)

FACILITATOR BROOKMAN: Please take your seats. Let's start. We're moving on. So here's where we are. I'd like you to look at this list of bullets one more time, and I'd like to just see if there are specifics that you might offer that would aid the Department of Energy in support of three additional agencies in this quest. I mean, that is, as you think about all these items, are there some things that they can do in 1605(b) that try to encompass the spread that we've heard already. I just that's the question, think about bridging -- the type of things that could work for the diverse interests here in the hall. What comes to mind for you? You want to start.

MR. CICIO: I think that because of the diversity of the marketplace, --

FACILITATOR BROOKMAN: If you're standing in the back of the room there, please close the door.

MR. CICIO: You've got projects up there and entity-wide and early today there was a comment made that said we need to be report good things happening in those projects, and yet we need a tier of guidelines, tier one -- projects being tier one, wanting companies to show the diversity of great

1 things they can do to show they're taking action. And then having the second and third tier with just  
2 tougher guidelines -- clearer, stronger guidelines that report for entity-wide emissions.

3 So I go back to I think part of a solution for this is a multi-tier set of guidelines that the  
4 project and the entity-wide emissions.

5 FACILITATOR BROOKMAN: And we've heard that the way to minimize double  
6 counting is, we've heard from Bill, that you minimize this when you use the [inaudible] at the project  
7 level to assure that the parties in that understand the boundaries on that transaction. Who's going to do  
8 what and give up essentially the right to a counting essentially. Other issues related to double counting,  
9 specifically. Kristin.

10 MS. ZIMMERMAN: Kristin Zimmerman, GM. I've just got a comment to Paul's  
11 statement. Paul, do you think requiring multi-tiered for guidelines or have the same guidelines for  
12 reporting for all tiers of the registry? But at each tier allow for different levels of verification,  
13 certification, with the onus of the reporting company to take for the blue standards, so to speak, of  
14 credits?

15 MR. CICIO: Yes, I think what you just said is a better way.

16 FACILITATOR BROOKMAN: Thank you. Although one could imagine across the  
17 spectrum of industries that you have this -- I hadn't really thought that out, but --

18 MS. ZIMMERMAN: I'm just suggesting that the 1605(b) is verifiable data to allow for  
19 the transfer of credits, if the company wishes to do so. And based on the data supporting multi tiers, that  
20 top tier is going to be the blue standard.

21 FACILITATOR BROOKMAN: Yes. Lee Anne. Once again, we're looking for ways to  
22 address these issues that might probably work for a large spectrum. Lee Anne.

23 MS. KOZAK: Lee Anne Kozak. Southern Company. I guess that is a variation of the  
24 tiered approach. It really goes to the question of transparency. It's not so much that the guidelines say  
25 here's one way, limit baselines, require certification, not require certification, but really goes more to  
26 providing information -- what is the baseline that's used? Have that included in your reporting. What  
27 kind of verification methods or projects offer alternatives. Provide that kind of information so that if  
28 somebody wants to use the database, they can go in and screen general items that they're interested in,  
29 search them out, that way they could pull out the items that way that meet their criteria.

30 FACILITATOR BROOKMAN: And in that way you help out any future regime.

31 MS. KOZAK: Whether there's a future regime or there's proposed dealing with things,  
32 looking for strategies to help them contribute to the President's -- whatever their purpose happens to be,  
33 to really provide a variety of pieces of information and help strengthen -- one of my concerns of the  
34 tiered approach is that you get, well, this is one tier, two tier, and you start getting -- do you have set  
35 criteria for this one or that one and which are the variables for you to try to play out those tiers. I think  
36 by doing screening, that offers more flexibility and the process eliminates that.

37 FACILITATOR BROOKMAN: And did you ever see verifiability as tied into your  
38 comment?

39 MS. KOZAK: Verifiability, or for the degree of verification would be one of the items  
40 that the reporter will provide information on. This is not certified, this is certified, verified -- and there  
41 are options in between. That would certainly be one of the elements.

42 FACILITATOR BROOKMAN: Thank you.

43 MR. CICIO: Let me clarify that. That means the user of the data eventually determines  
44 whether it's a gold standard that survives the user?

45 MS. KOZAK: The idea is that it would allow the user to set their own criteria. It's a  
46 string of standards for their own criteria for the purpose of the [inaudible]. If it's somebody looking for a  
47 gold standard, then they could set their criteria and screen --

48 MR. CICIO: They would set their standard for their own level --

49 MS. KOZAK: For their own gold standard, whatever it happens to be.

50 FACILITATOR BROOKMAN: Carlos follow on.

1 MR. ALARCON: Carlos Alarcon with CO<sub>2</sub> Financial. I just want a point of  
2 clarification. Kristin, would you be able to convert say, your silver standard emissions to gold emissions  
3 by different standard of verification?

4 MS. ZIMMERMAN: Absolutely. [inaudible] the reporting company because I've got  
5 the standards, I have to go through extreme rigor on certification verifications.

6 MR. ALARCON: But it's also more dollars in your pocket if you convert those credits to  
7 the gold standard.

8 MS. ZIMMERMAN: I would certainly hope that the return --

9 MR. ALARCON: -- get a feel for what the marketplace actions are.

10 FACILITATOR BROOKMAN: Yes, Janet.

11 MS. RANGANATHAN: The notion of multitiers sounds really good, but in practice it's  
12 going to get complicated very quickly, because there are so many barriers here, depending on how we use  
13 gold and silver. The only concern I have is you can't possibly--

14 FACILITATOR BROOKMAN: I thought we were differentiating between the ones at  
15 the top would be creditable and in some future state verifiable, and other things that may be learning how  
16 to be involved in gathering this information, others that are kind of in the scheme in the enterprise, and  
17 others that said, well, now we got to the point where I'm getting this evolution where it could be played.

18 MS. RANGANATHAN: From the discussions I've had with companies a lot of effort  
19 goes into this. It's important to get it right the first time because if you have to go back as far as more  
20 costs. And the companies, I'm thinking of [inaudible] for example, even though at this particular time  
21 they may not be thinking about that -- that's a trade or commodity -- it might be possible that in the future  
22 it may wish to. So my view of it is --

23 FACILITATOR BROOKMAN: I think about Paul McArdle of EIA, if anyone specifies  
24 at some point in the future a certain number of fields. Can someone -- you're going to have to say these  
25 are the opportunities, these are the potential places where an entity could report different kinds of  
26 information.

27 MR. McARDLE: Paul McArdle with EIA. At this point in time we have project level  
28 reporting and project types, but even within those project types there is what is called project codes  
29 which are further subdivisions of the project types. Now, as we move down the road, we don't know  
30 what that form will be like. EIA is certainly flexible and is willing to go and have that form to --

31 FACILITATOR BROOKMAN: Okay, do you have a follow on, Kristin?

32 MS. ZIMMERMAN: Again, just back to the point of 1605(b) guidelines -- verifiable,  
33 credible. One set of guidelines that reads into a multitiered registry. The bronze tier are those company  
34 just getting started reporting data with no intention to ask for a credit. Now what if they want to move  
35 that bronze into a silver level, then they go and they inquire third parties to audit, or they've used that  
36 1605(b) set of guidelines to convert their reporting. And then, again, it's the gold standard in the top  
37 quality certification and verification. It is the highest quality tonnage to transfer, and transfer not just  
38 within the US, but across borders, so the green dollar is the green dollar anywhere around the world.

39 So, the background, not just any separate set of guidelines. This is one set. Now there  
40 might be sub-elements to that set of guidelines that would offer the reporter from the get-go that they  
41 know that hey they're going after that gold standard. That blue chip. And they're going to have to go to  
42 appendices A, B, and C to make sure that they've got that level of detail.

43 FACILITATOR BROOKMAN: Not just A.

44 MS. ZIMMERMAN: Right.

45 MR. FODIS: Steven Fodis, Van Ness Feldman, on behalf of the Large Public Power  
46 Council. It's come up a couple of times where we've made references to a gold standard and something  
47 that would require independent third party verification. Is that what I'm hearing? I just want to go on the  
48 record, and I know we're going to get -- I assume, to this issue on the second day, but I don't think, at  
49 least my view is that that would be a prerequisite, if there is going to be a tiering process for a gold, blue  
50 chip credit. I just want to make that clear.

1 FACILITATOR BROOKMAN: I appreciate your inhibition on the subject as well. I  
2 appreciate others' inhibition on this subject knowing it will be covered on the agenda tomorrow. Yes.

3 MR. ALARCON: Just one more response to Kristin. So you are comfortable going out  
4 of the 1605(b) with your tonnage at the blue chip or gold level versus intensity level?

5 MS. ZIMMERMAN: I believe, and I say this capriciously, that the progress of 1605(b)  
6 should be shown in intensity [inaudible] for time. If the reporting company that has achieved 1605(b)  
7 wishes to transfer credit, they're going to have to take it off line and go with absolute, probably with a  
8 third party. That's not made public. That's absolutely not made public. Do you follow me?

9 MR. ALARCON: I do follow you. It's in the performance and balance, and I think it's a  
10 great thing. I just want it stated --

11 FACILITATOR BROOKMAN: So that's a soft question. Please, Paul.

12 MR. McARDLE: The other thing to add just from what I was just hearing is that it's up  
13 to the company to decide whether or not they will get involved in a trade. Not all companies do, or can,  
14 because they're not going to be able to reduce absolute quantities. So this approach would allow for a  
15 company that wanted to trade, they can get it certified by themselves. The US government has nothing to  
16 do with that. It's a company decision and company action, and in essence when a company submits its  
17 information, following its guidelines to the DOE, the DOE can say that this company has followed the  
18 guidelines and period, that's it. It's up to the company, if they want to trade, to get it certified and  
19 verified, and they can take those tons to New York city, sell them to Amsterdam, sell them to any  
20 country. It takes the government out of the area of do they have authority or not.

21 FACILITATOR BROOKMAN: Thank you. Yes, Bill, please.

22 MR. FANG: Bill Fang, Edison Electric Institute. I wanted to supplement what Lee  
23 Anne Kozak had to say. We do have concerns about multiple tiering, about levels -- three or four or  
24 more levels. We do agree that there should be one set of guidelines. EIA has one registry. You can have  
25 one single registry and have a subset within that that can handle transferable credits based on protection  
26 of credits for five years. And we're not convinced that you have to have bronze or silver or gold credits,  
27 or however you want to denominate those. We're not convinced that that adds anything significant to the  
28 system.

29 In terms of verification, the statute clearly talks about subcertification. To the extent that  
30 the reporters want to opt for a third party verification, they can use do so and the market can decide what  
31 kind of credit --

32 FACILITATOR BROOKMAN: Okay, thank you. Yes, Brad Hollomon.

33 MR. HOLLOMON: First on the question of displaced emissions reductions in electric  
34 use or global energy, our contemplated program, it would be a big convenience if the Department of  
35 Energy or someone else, prior to making it easier for users, this whole process and so on, to access the  
36 kinds of analysis, the kind of utility simulation which the utilities are able to do, which allows other  
37 people to do a certain amount of work on the part of EIA with ISOs and state regulators and that sort of --

38 FACILITATOR BROOKMAN: What about calculating baselines -- historic or dynamic  
39 baselines? Is there a way to work that so it works for the parties in the room?

40 MS. KOZAK: Lee Anne Kozak, Southern Company. I'll touch on that issue of dynamic  
41 baselines -- I'm not sure if it's quite in the dimension that you had in mind.

42 FACILITATOR BROOKMAN: Help us get started.

43 MS. KOZAK: You could look at, and even in the background papers, so perhaps even in  
44 the annotated agenda, there was the reference to fixed versus dynamic. I guess the option that I would  
45 propose is for a particular project, you -- a project developer would want to know what the baseline for  
46 that project is going to be. They don't want to have three years down the road find out that the baseline is  
47 something different or has changed.

48 Now, up front, you can decide that that baseline may be different for different years, but  
49 the point is that the baseline for the project over time is established up front. If you've got two different  
50 projects, or two similar kinds of projects started at two different points in time, that baseline may be

different further down the road because circumstances may be different. So I guess that's kind of the distinction I'd like to make. But the important point is that a project developer knows what the baseline is up front.

FACILITATOR BROOKMAN: And then projects that lend themselves towards that kind of specificity, it would seem to be better intuitively. I'm wondering if you scale beyond that to entities -- larger -- you know, corporate scale baseline?

MS. EATON: Rebecca Eaton, WWF. I know we're talking about emission reduction and sequestration on this, however the question about entity-wide baseline, there are guidelines for accounting just for acquisition and investiture activities and how to adjust for it. Or actually, I should correct that and say not adjust for organic growth of emissions, simply to reflect that those emissions had a life for a company or an entity that acquired them or if a company or entity divest themselves of those, so that those emissions' lifespan is what tracked to that entity's baseline.

FACILITATOR BROOKMAN: And can you say organic growth, what that involves?

MS. EATON: Sure. If a company is investing in a new building or an expansion, and therefore emissions are being created, those would not trigger an historic baseline adjustment, because the baseline adjustment would get triggered when tracking emissions.

FACILITATOR BROOKMAN: That's a normal aspect of the growth of that company is organic enough to start.

MS. EATON: That's right. And if -- or a concern -- I heard a little earlier, stakeholders being concerned about that being too onerous, but it certainly could be developed to -- going back to the concept of materiality, when it would be appropriate to trigger an historic baseline adjustment. If this activity were 25 percent of a company's inventory over the period of those types of materiality guidelines could be established.

FACILITATOR BROOKMAN: Okay, and I guess your last comment implies, or at least references multiyear reporting at some level, is that correct?

MS. EATON: That's right. Absolutely. I think that really looking at corporate wide reporting over the period of time is really the most effective way to track emissions.

FACILITATOR BROOKMAN: Brad.

MR. HOLLOMON: As I tried to say before, dynamic baseline is to some extent the practical way out of the problem of intensity, that if you are basically measuring tons of CO<sub>2</sub>, but you want to adjust for the fact that the output, whatever it is, is increasing because of increased demand, you can handle that with -- basically with a dynamic baseline.

FACILITATOR BROOKMAN: Other comments on the -- on the list. Civi.

MS. JAMARAYAN: I don't agree with Lee Anne Kozak regarding the fixed baseline for projects, however when you go to an entity wide system which undergoes dynamic changes such as [inaudible] customers, you have to look at having a dynamic baseline approach. For example, based upon --

FACILITATOR BROOKMAN: She suggests acquisition and that sort of thing -- structural features -- is that what you're also referencing or --

MS. JAMARAYAN: That can be another possibility but you have to look at the actual growth of output. So that issue --

FACILITATOR BROOKMAN: So going back to intensity issues.

MS. JAMARAYAN: Right.

FACILITATOR BROOKMAN: You wish to hold yourself harmless to increases in output.

MS. JAMARAYAN: Exactly, because we have two dimensions that go up -- our intensity will be going down because of efficiency or change or whatever, however, for reasons beyond a company's control, they may have no choice but to use --

FACILITATOR BROOKMAN: Okay, final comments on this slide? Yes, please, Rebecca.



1 MS. EATON: This is Rebecca again. I just come to the understanding that if the  
2 foundation of reporting is based on a company's entity-wide, absolute emission, it certainly provides the  
3 flexibility if additional items wanted to be put on. For instance, if it wanted to -- if a company wanted to  
4 be indexed to its production output, or inflation adjustment of revenue over time, it could easily be  
5 accounted -- that information could also be put in. But to report entity-wide emissions of course you  
6 have to have absolute emissions.

7 FACILITATOR BROOKMAN: Thank you. Yes, there was a comment that I heard in  
8 the restroom that the intensity measures were really -- see if I've got this right -- the intensity measures  
9 will work well in looking -- in doing the function, looking at intensity over time and emissions output as  
10 having something creditable and sellable would get translated back to the parties. So I offer that. Does  
11 anybody see that differently or is that the way it typically works? Speak now. Yes, please.

12 MR. JONES: Russell Jones, API. I would see that being consistent with ...

13 FACILITATOR BROOKMAN: Okay, thank you. Brice, you want to chime in?

14 PARTICIPANT: It comes down to what you -- if you anticipate that you're going to be  
15 getting ten tons of CO<sub>2</sub> as a baseline, and five tons of CO<sub>2</sub> under your proposed scenario, then what  
16 happens with the intensity is that you discover your business increased or something like that, and so  
17 instead of using ten for the baseline scenario you use 20, and your actual scenario you may end up  
18 reducing ten. So instead of getting zero tons, you're getting ten tons of credit, but it's still tons. It's just  
19 that the tonnage gets adjusted -- the baseline gets adjusted so the tonnage that you're saving comes out  
20 right.

21 That's the way we view the use of intensity, that measure of a baseline and changes to  
22 that baseline, but the end result is tons.

23 FACILITATOR BROOKMAN: Let's go to the next slide. Yes, please. Your name for  
24 the record.

25 MS. WHITMAN: Carol Whitman, with National Rural Electric Cooperative  
26 Association. Most of this discussion is about larger entities and I just want to make sure that there are  
27 smaller entities who are being held to these projects, particularly --

28 FACILITATOR BROOKMAN: Carol, I'm sorry -- the mike, is that working? Thank  
29 you, okay, just get closer.

30 MS. WHITMAN: You know, smaller entities, farmers, ranchers are certainly capable of  
31 doing projects that can reduce emissions, and they should be able to participate in the registry. So I just  
32 wanted to make that point that don't lose sight of small entities.

33 FACILITATOR BROOKMAN: Thank you, that's useful. And I think that's consistent  
34 with the present 1605(b) program as I understand it. And I saw David.

35 MR. DONIGER: I'd just like to say that I'm not hearing very many -- I'm hearing a lot of  
36 attempts to try to figure out rules that would work with particular industries to have their needs met to  
37 support project credits. If everyone in the whole country applied these rules, you'd have a totally biased  
38 account [inaudible] come up with some neutral rules --

39 FACILITATOR BROOKMAN: Thank you. Miriam, and then we're moving on to the  
40 next slide.

41 MS. LEV-ON: This is Miriam Lev-on. I think the International Energy Agency has  
42 done a project which is supposed to be international with DOE which has to do how we figure out  
43 projects, especially baseline -- and especially for a large project that are multi-[inaudible] like new power  
44 constructions for big companies around the world, where you take into account the dynamics of what  
45 would be the implicit increases in energy efficiency over the years, but then you look for additional  
46 things that the project developer has done to [inaudible] emissions, and that the decrease is the one that  
47 you get the credit for will came up in the last year.

48 FACILITATOR BROOKMAN: Thank you. Let's shift to the next slide. This is the  
49 final slide before the break and we want your thoughts and comments on the relationships to other  
50 voluntary programs. Sorry. This is the last slide in this section. Other issues on confidentiality,

1 considering state and international protocols -- yes, this is the same slide -- and relationship to other  
2 voluntary programs. Other comments on these? We already referenced confidentiality this morning. We  
3 also talked at some length about state and international and other protocols. We're talking now about the  
4 actual issue of calculation methods -- actually trying to find a way to make these things come together.  
5 Yes.

6 MR. CASHIN: Mike Cashin. I'd like to reinforce the point made earlier about the  
7 emphasis and protocols, keep in mind that the energy resources that are available around the country.  
8 [inaudible] intensity, involved in [inaudible] When you talk about referencing gains, these would be very  
9 difficult baselines for the [inaudible] group that you're in. Kind of reference the east coast against the  
10 west coast.

11 FACILITATOR BROOKMAN: Did you hear that comment? We're talking about  
12 making certain that what you do is able to account for the variation -- say it louder into that mike.

13 MR. CASHIN: We're trying to recommend that there are regional differences so that you  
14 wouldn't be, for example, trying to benchmark [inaudible] intensity a dynamic appropriate for one section  
15 of the country, that could not have [inaudible] in other sections. It's something that is useful to your  
16 resource mix and you should be looking at changes in behavior ...

17 FACILITATOR BROOKMAN: Thank you. So are there summaries, comments, related  
18 to confidentiality, state and other protocols, and other voluntary programs? Summary comments?  
19 Please, Kristin.

20 MS. ZIMMERMAN: Kristin, GM. I just want to make folks aware, to make sure that  
21 we comprehend harmonization with what the ISO group is doing now with their greenhouse gas reporting  
22 / standardization / certification.

23 FACILITATOR BROOKMAN: Can you give us a summary of what ISO is doing?

24 MS. ZIMMERMAN: Their timeline, I believe, to come up with a standard is 05, middle  
25 of 05 -- but correct me if I'm wrong. And there is a long process of review ... that they're going through.  
26 I think it really needs to be coupled or tied in. This is going to be something that is a standardization for  
27 greenhouse gas reporting and for certification procedures.

28 FACILITATOR BROOKMAN: I think I read or someone told me that the ISO stuff is  
29 working with or stemming from the WRI work. Is that correct?

30 MS. ZIMMERMAN: As I know it, that is absolutely true. There are some differences  
31 from what the DOE and 1605(b) will involve into --

32 FACILITATOR BROOKMAN: Okay, Rebecca.

33 MS. EATON: I think I've tried to mention the ISO project. I think it brings to point also  
34 that the fact is that that process has a pretty long timeframe, the year 2005. It's certainly looking at the  
35 THG protocol. I think this first point with the THG protocol is something that should be looked very  
36 closely at for international consensus -- they're going to have a second iteration this spring [inaudible]  
37 foundation for many other initiatives.

38 FACILITATOR BROOKMAN: Please.

39 MS. SCHAFFER: Amy Schaffer, Weyerhaeuser Company. I think that it's very  
40 important to recognize THG protocol, especially because a number of sectors, the forestry sector in  
41 particular, has worked with WRI and WBTS to come up with the calculation tool for our pulp and  
42 paper side of the house to use the protocol, and there's recognition and acceptance world-wide for that.  
43 So there is -- it's critical that we really pay attention in the 1605(b) process to the THG protocol -- and the  
44 accompanying calculation tools for the sector.

45 FACILITATOR BROOKMAN: Thank you. Lee Anne, and then Bill.

46 MS. KOZAK: Lee Anne Kozak. One quick comment. The ISO process is looking at  
47 the WRI protocol, being informed by them, but it is also looking at being informed by other systems that  
48 are out there, so not looking exclusively at WRI.

49 FACILITATOR BROOKMAN: Okay, and before Bill speaks I want you to queued up  
50 just to say briefly when he concludes, what the relationship needs to be if this is a voluntary program.

1 Bill.

2 MR. TOWNSEND: Just to comment on international protocols, we also might look to  
3 Canada because we do a lot of energy trading, we do lumber relationships, there are a number of  
4 emissions issues, and a number of cases, whether it's P-[inaudible] or Kanki (ph), they've [inaudible] for  
5 some time, it's been reasonably successful. A number of industries throughout the day have been vetted  
6 out to Canada, so just this thought, I think -- and because of its proximity as trading partners -- I would  
7 encourage you to take a look at the Canadian programs, specifically those --

8 FACILITATOR BROOKMAN: Thank you. Miriam.

9 MS. LEV-ON: Miriam Lev-on on behalf of API. I just want to point out that API has  
10 recently completed a study called "Practices of Reporting Around the World" and as it relates to oil and  
11 gas associations and government reporting guidance as it relates to the industry, and copies of this report  
12 are available right now. I can provide it to DOE. It will be distributed at the API workshop later this  
13 week, and it looks at Canada, Australia, the UK system and tries to draw up some conclusions about  
14 where our [inaudible] accounting [inaudible] estimations, and we find some overall differences, and I  
15 think it would be worthwhile to take it into consideration.

16 FACILITATOR BROOKMAN: Thank you. Yes, Ed.

17 MR. SKERNOLIS: Ed Skernolis, Waste Management. I hate to have to say the obvious,  
18 but I hope in the context of looking at other protocols and other voluntary programs, also talking about  
19 looking at voluntary transactions in trade programs as well. [inaudible] something in how the  
20 marketplace [inaudible] looks at some of these issues. ...

21 FACILITATOR BROOKMAN: Thank you. Kristin.

22 MS. ZIMMERMAN: Kristin, GM. I would just make a comment -- the voluntary  
23 programs that are at the state level, voluntary initiatives used to reduce emissions, are --

24 FACILITATOR BROOKMAN: Yes, Bill Fang.

25 MR. FANG: Bill Fang, Edison Electric Institute. I certainly agree with that last  
26 comment and go further than that. There is only one standard on reporting in the US and that's the  
27 current 1605(b) guidelines of course. The other -- any other systems have to get in line [inaudible] is  
28 what it's going to become. DOE can base its guidelines on its own determination of what is the best and  
29 most accurate approach. And furthermore, the other programs are going to have to use the more rigorous  
30 guidelines to qualify for emission reduction credits.

31 I'll just repeat a comment -- there was a comment about looking at the Canadian  
32 approach. Yes, I think the Canadian baseline protection issues are worth looking at.

33 FACILITATOR BROOKMAN: Thank you. Other summary comments on other  
34 voluntary programs. Let's go to the next slide. We're going to breakout groups next. We're going to take  
35 this room here and pull out the partition, so it's going to take about ten minutes to do it, so you have an  
36 additional ten minutes of break while we reconfigure the room. You can see here the electricity  
37 generation and the independent renewable energy will be meeting over here on this side of the wall, on  
38 the right hand side. The industrial and large sources group will be meeting on this side of this same room  
39 here. Please take your stuff with you when you go. Small, civic sources [inaudible] just out the door  
40 and around the corner, one; and agriculture and sequestration in two, just around the corner.

41 We can expect to come back no later than four. And your facilitators will be there to  
42 assist in this conversation. I would ask you at the break to do the following: the annotated agenda has a  
43 list of specific questions to queue the discussion. It's on page 13 or so. And I think all of you know what  
44 group you're supposed to be in, right? Okay, so we'll be starting back up at four o'clock in the breakouts.

45  
46 Thanks for a great day. We won't see you again until 8:30 in the morning.

47 (Whereupon, at 3:50 p.m., the meeting in the above captioned matter was adjourned, to  
48 be reconvened in breakout groups at 4:00 p.m., and to return in full session tomorrow morning, Tuesday,  
49 November 18, 2002, at 8:30 a.m.).

## 9. TRANSCRIPT OF PROCEEDINGS FOR DAY 2

Voluntary Greenhouse Gas Reporting Workshops

UNITED STATES DEPARTMENT OF ENERGY

**VOLUNTARY GREENHOUSE GAS REPORTING  
PUBLIC WORKSHOPS**

Washington, D.C.  
Tuesday, November 19, 2002

PROCEEDINGS

8:40 a.m.

Opening Comments and Agenda for Day 2

MR. BROOKMAN: Good morning, everybody. Nice to see you back. Thanks for being here so we can get an early start on it.

The agenda for today is to start off this morning with report-backs from the four breakout sessions we had yesterday. We haven't established an order for that yet.

I would ask, as the individuals are reporting out from the breakout sessions if you collectively could be listening for common themes, kind of crosscurrents. That would be helpful because I'm going to be trying to note those, especially at the end of the report-backs.

We're going to go from there to verifying emissions and reductions. And those of you look at your agenda, you can see the four specific issues that are listed in that segment.

We're going to take a break mid-morning sometime, probably around about 10:45, maybe 10:30 this morning.

We're going to go from there to managing the 1605(b) registry. And you can see on your agenda those issues: certifying real reductions, confidentiality issues, prior year reports, and not penalizing under future climate policy, transferable credits.

I think it's quite likely we'll get done before 4:00 today. I'm not quite sure. Yesterday we really covered a tremendous amount of ground in a very efficient sort of a way. So if we stay with that model, we'd probably finish before four today. I'm not sure quite what time.

I think some of these -- I think both verifying and managing, people have a lot to say, as I understand. So we'll see how that works out.

A few housekeeping items. Some people have been requesting a participants list. We will -- the Department will make a copy of that and -- of the participants list and I guess we'll have it available here today, is that correct? At the -- at the coffee break. And also, it will be posted on the Web, as I understand it, right, Michael?

And in addition, for those of you that are staying in the hotel and paid for parking or are going to have to pay for parking, there are parking vouchers out there with Adrienne at the -- at the registration table. So -- it's a half-price voucher, right? So save yourself a few bucks.

Other comments, questions, things to -- to raise at the outset? Okay.

AUDIENCE MEMBER: What was the website?

MR. BROOKMAN: Can we put that on the participants list? We'll -- we'll put it -- we'll put it on there.

SPEAKER: It won't be there until probably the end of the week.

MR. BROOKMAN: The participant list?

SPEAKER: Right.

MR. BROOKMAN: Okay. Okay. That wasn't on the record.

The participant list will not be on the DOE website, says DOE staff, until the end of the week. Okay.

Session IIc. Emission Reductions: Reports  
from Breakout Sessions and Discussion

MR. BROOKMAN: So let's start with the -- the report-backs. How was it in the breakout groups? How -- how was it for you kind of generally speaking? Did you think the questions were the questions that you wanted to discuss? Were they off-point, on-point? And how was the dynamic inside the group? Let's just talk about that generally.

Just -- hard to get started. Who's going to start us off? How was it generally in these breakout sessions? Someone push that little red button.

Yes, Paul?

1 MR. McARDLE: Yes. Paul McArdle, EIA. I definitely think they're worth doing  
2 because -- well, the -- I mean, you get the crosscurrents in the plenary, but then everybody with an  
3 interest in that particular sector or application gets together. And you certainly get some concentration --

4 MR. BROOKMAN: Yeah.

5 MR. McARDLE: -- on the issues.

6 MR. BROOKMAN: "Concentration" is a good word. That's -- that was -- in my session  
7 that was the way it worked.

8 Other sessions? How'd it work in there? Did you get that kind of concentration? Of  
9 course, fewer people, more air time for all the individuals. That makes it a lot better. I mean, there was a  
10 lot more opportunity for that exchange to happen.

11 Other comments before we start? I guess you all want to start, is what you're telling me  
12 implicitly.

13 Who would like to go first? Is your group ready to report back? No, they want to go  
14 second.

15 You want to start off by reporting, Paul? Yeah -- no -- yeah -- no. Yeah. Right there.  
16 That's fine. Come over -- turn around here so people can see you.

17 (Pause)

18 MR. McARDLE: Paul McArdle, EIA. First of all, I want to thank John Staub from  
19 DOE because he sent me notes from the session last night at my home which helped me a lot, combining  
20 with my notes to look over.

21 Secondly, I didn't confer with my colleagues in the session, so I don't know if they agree  
22 with the consensus I have or the -- or the notes I have here.

23 And lastly, I'm a representative of EIA but whatever I say here doesn't necessarily  
24 represent what EIA's views are. So just all those caveats.

25 And I'm just going to go through the session kind of chronologically in time, what came  
26 up first.

27 The first issue we talked about was rate basing of credits. Very little discussion occurred  
28 then. The issue there was, should the credit, I guess, accrue to the utility right away or should it be rate-  
29 based. There's a potential area of agreement -- and that's the word I'm going to use because I don't want  
30 to use the word "consensus" after conferring with Doug -- that DOE would not get involved in that rate-  
31 basing issue. That would be up to the utility and the, I guess, the PUCs, et cetera.

32 The second issue we talked about was the adjustment in emissions and baselines due to  
33 changes in weather, rainfall, or load patterns. I kind of jumped in right away from EIA's perspective  
34 talking about the existing 1605(b) program and that it's actually allowed under the program to do  
35 weather-adjusted reference cases and baselines, although to the best of my knowledge, and I'd have to go  
36 back and look at the database, I don't think anybody's taken us up on that because it's not an easy thing to  
37 adjust for weather. You'd have to have a pretty good econometric model to do that. And maybe the costs  
38 are too great relative to the benefits.

39 Another issue that was brought up was the impacts of price changes. One of the utilities  
40 -- I forgot who was -- I think it was PSE & G, that's their old name -- brought up the fact that if natural  
41 gas prices rise, then they may be -- they may turn away from gas and use some more carbon-intensive  
42 fuels, oil, or coal. And just due to those economics, their total emissions would go up. So they brought  
43 up that as an issue and how that could be adjusted for.

44 I don't think anybody's ever done that or attempted to do that in the present 1605(b)  
45 program in terms of adjusting their reference case or baselines.

46 I brought up also the issue that under the current 1605(b), your baseline -- your base year  
47 can be a year but it also can be an average of years. And that also creates kind of a smoothing effect.  
48 And I think that's the whole thing around question two, is attempting to smooth out these -- the  
49 randomness in both emissions and reductions.

Also, I pointed out that our current emission factors for electricity that people use -- say if they're purchasing electricity and they want to know how -- what their indirect emission reductions would be -- is also -- is also a three-year rolling average based on EIA data.

I guess I would categorize this discussion on this question as, the potential area of agreement there would be that maybe some smoothing mechanism may be called for to smooth out these bumps in the road, so to speak.

The next issue that came up was direct versus indirect emission reductions and who gets those emissions reductions. Some of the folks in the group thought that could be done contractually, a contractual agreement between the direct emitter and the indirect emitter would be sufficient to provide property rights in that area.

Another -- another member of the group brought up the fact that whether you're assigning property rights at this point in time was not particularly relevant since we don't have a -- a true crediting mechanism in place but it was still important to record the direct and indirect reductions and you would sort that out later, when a regulatory program is in place.

Within the same issue, the issue of -- sub-issue of cogeneration came up again where, say you're putting in a high efficiency cogen unit in an industrial facility that may actually increase the total emissions of that facility. But it may reduce indirect emissions because -- because it's a higher efficiency application. You'd be reducing central station power emissions.

Another issue was brought up within this context, and that is that assigning all property rights to direct emitters does not incentivize indirect reductions in a non-mandatory program because there's a lack of a short -- a strong price signal.

Also brought up was double reporting versus double counting. The issue there is, double reporting is not necessarily a bad thing if you're not giving out credits because then you're just, again, accounting for people's actions. But double counting would be an issue once you started giving out credits. Then you would have to assign property rights.

The next question that came up was acquisitions and divestitures, how they should be treated. Under the -- we haven't had this happen a lot in 1605(b), and it's really only an issue if you're reporting at the entity level because then you have to merge two entities.

But the present 1605(b) program does allow for the adjustment of reference cases and emission estimates if you have a merged company. Two summers ago I know we went through adjusting two reports from two fairly large utilities that merged. And we merged together those reference case and emission estimates.

I mean, perhaps -- I guess, after going through that discussion, maybe an area of potential agreement that would be that there's -- some adjustment should be allowed when you have a merged or -- a merge or an acquisition or a divestiture.

The next issue that came up was reductions by renewables and how you account for them. One of the issues there was how do you -- when someone is buying renewable power from a utility or it's being -- I guess what I'm saying is, if you're -- you can't distinguish the electrons once they're going over the wire. And one of the utilities in the room said even -- it's very difficult to tell which electrons are renewable and which are not. And even doing -- developing load dispatch models is difficult even for a utility to tell what electrons are which and that entity averaging may have to be used as a substitute in terms of determining what's the carbon intensity of the power being sold by a particular utility.

I do think, though, a potential area of agreement there that came out of that was that some sort of credit should be given for renewable or low emission technologies.

The next issue dealt with causation in terms of, when is a reduction a reduction, I guess. There -- there was kind of two different camps in the room at that point in terms of causation. There was kind of one group that felt that a ton is a ton is a ton, that the U.N. framework convention is -- is an absolute reduction and that's the world that a lot of people look at. So a ton -- how it happens doesn't really matter. And the president's climate change initiative, again, it's not so much how a ton reduction



occurs, it's just that it does occur.

Whereas there's some other members in the group that thought you had to distinguish between an any -- what's called an "anyway ton," it would have happened anyway, or a ton that was actually additional, above and beyond the business-as-usual case. And within that context, several tests were offered up. A cost-benefit test. An investment test where if the -- the action that produced the emissions reduction was not the highest -- did not have -- I'll just call it the highest rate of return, but the action was taken anyway, then that would be additional.

That same person that was raising this issue has also said that some of these may be difficult to implement but they would -- they could be used to differentiate between "anyway tons" and additional tons.

The next issue we talked about was de minimis emissions for, say, a renewable project, a wind turbine. Nuclear facilities not producing any emissions, but yet, hey, it may have some trucks around, it may have some very small emissions. Should there be de minimis requirements for a renewable project. I don't know if we essentially reached any agreement there except acknowledging that there may be cases where there are some reductions via a renewable project but -- and the emissions may be small. We may want to take that into consideration.

The last issue we talked about was ethanol. I'm not sure how this kind of snuck in there. But discussion there centered on, ethanol is obviously a renewable product and it's -- it's based on carbon -- or the emissions come from the carbon in the plant and the plant is grown again and again. And the emissions from the plant are actually emitted in the atmosphere but when the plant grows again, it reabsorbs the emission. So it's technically what we'd call a zero emission factor for -- for ethanol.

But folks brought up the fact that in the production of ethanol, you also produce emissions, burning of fossil fuels, et cetera, to produce the fuel and consideration should be given to that fact, that it's not -- maybe it's not a zero but maybe it's -- on net it's better than maybe a fossil fuel. Some folks mentioned it's a complicated issue.

Lastly, from our perspective in the 1605(b) program, I brought up the fact that the present guidelines have some emission factors for alternative fuel vehicles that take -- take -- attempt to take into account the consideration that ethanol is a renewable but it also has some emissions along the way. We did not necessarily reach any agreement on ethanol.

MR. BROOKMAN: Thank you.

MR. McARDLE: And that's -- that's all I have.

MR. BROOKMAN: Good report. That was the electricity generation sector. Other members of that group that wish to add to Paul's report or offer a counterpoint? Yes, Janet?

MS. RANGANATHAN: I just wanted to mention that the discussion about when is reduction not a reduction and should you include "anyway tons" related to the project reporting and not entity reporting.

MR. BROOKMAN: Ah.

MS. RANGANATHAN: And -- and even for project reporting, it really depends on what the goal of the reduction is. It was pointed out that if we're using reductions to offset emissions increases with cap systems, the "anyway" really does matter because of the environmental integrity issue.

MR. BROOKMAN: Thanks for that clarification.

Other comments from participants in that group or comments more generally? Please. Go right ahead. Your name, for the record?

MS. EATON: Rebecca Eaton, WWF. I wasn't in the group, but one thing I noticed earlier on, mentioning that it doesn't matter how a reduction occurs as long as it occurs. And I think that could make sense if, of course, entity-wide reporting is -- is happening on an absolute basis and we are seeing a reduction over time. That is the ultimate goal, certainly of international frameworks. But I think that's a less relevant point if you're not doing entity-wide absolute reporting.

1 MR. BROOKMAN: Okay. Thank you.

2 Other points, comments on -- from this group and on the report? That was pretty  
3 thorough and complete. Thank you. That was well done.

4 Which group wants to go next? Yes, Rebecca? Great.

5 MR. WHITENTON: Hi. I'm Mark Whitenton with the National Association of  
6 Manufacturers. Rebecca with WWF and I have been asked to summarize our group.

7 The industrials, of course, are one of the largest blocks of greenhouse gas emitters as  
8 well as one of the largest blocks of employers in the United States, and it's worthwhile that we had our  
9 own group.

10 Thanks to Mike for getting it up on the screen for you so that will help you in case you're  
11 not following all of my words this morning. It's early for me.

12 (Slide)

13 MR. WHITENTON: To begin with the first slide, we were discussing whether -- what to  
14 do about physical measures of the output. Should there be -- what do you use for the numerator in terms  
15 of developing an intensity measure. Is it -- it was pretty easy, I think, in terms of commodities.  
16 Obviously, gas is MCF throughput. Petroleum companies, barrel production. Steel, tons of rod output.  
17 And chemicals, by the pound.

18 But then you quickly get into some problems once you start talking about value-added.  
19 Chemicals can go through, as was pointed out in our group, 15 iterations of processing before it comes to  
20 the final consumer. Steel, aluminum, alloys, and then turning steel into widgets. Petroleum, presumably,  
21 also has, although less apparent, some degrees of value-added.

22 So once you get past the commodities stage, it gets very difficult to have a across-the-  
23 board kind of -- of measure. That led us to think that -- the heterogeneous goods.

24 Rebecca, do you -- remember that point? Because that's unclear to me.

25 MS. EATON: Yeah. I remember for -- Johnson & Johnson participated in our group.  
26 And that's a company that does not use an intensity measure at this point. That's a company that has an  
27 absolute reduction target of reducing its greenhouse gas emissions seven percent below 1990 levels by  
28 2010. So they have not found it useful. They actually found it confusing historically when they did try  
29 to look at intensity measure. So they used absolute reporting.

30 MR. WHITENTON: Comparing toothpaste and mouthwash and soap, it was -- it was --  
31 is clearly a problem.

32 The service industry has an additional set of problems. Although they do use a lot of  
33 energy and manage a lot of energy, the waste management representative noted that a lot of what they do  
34 is not under their control in terms of how -- whether they can burn or not and how they have to dispose.  
35 So they have less opportunities to reduce than, maybe, other industries.

36 MS. EATON: We had a lot of conversation about who should choose the output  
37 measures. And on the whole, there was -- for certain commodities, some of the stakeholders thought it  
38 could be appropriate for Department of Energy or trade associations or -- especially individual companies  
39 to choose output measures.

40 So there were very -- there were very few instances when there was comfort level, I  
41 would say, in having the Department of Energy establish what those output measures would be in -- in  
42 terms of units that a company might be indexing towards. Companies felt increasing comfort level  
43 having the trade associations choose intensity output measures and then, of course, the most comfort  
44 level if those individual companies were choosing their own output measures.

45 Let's see. The last point that came up in this part of the conversation too is that while of  
46 course we were focused on -- on looking at output measures for -- to answer this question, we certainly  
47 raised the point that decreasing intensity doesn't necessarily mean decreasing tons of greenhouse gas  
48 emissions. So we wanted to just make sure that that was represented.

49 And it was cited that the last decade's worth of performance in the United States

economy showed that, where our economy, of course, had decreased its greenhouse gas intensity but had increased emissions. So a couple of the stakeholders had mentioned that once again as just an issue with the overall intensity output measures.

(Slide)

MR. WHITENTON: A lot of discussion about credibility. And I think, although we didn't have -- we did not have a consensus on whether you should always be foreseeing a absolute or an intensity-based reporting requirement, many people felt -- many of the industry felt it should be optional to report both.

If absolute data is to be filed, however, then we got into a discussion about how critical confidentiality issues become, particularly because a small company or a facility-based report, if you could get down to that level, if you know what the absolute emissions would be, then that -- that -- and if that information is made available to the public, then that information is -- could competitively harm the entity reporting.

And that is a major concern and a roadblock, we think, to a lot of -- of manufacturers using 1605(b). So I think that needs to be addressed up front and satisfactorily.

A question was raised by our -- what did you call him? Our monitor?

MS. EATON: Moderator.

MR. WHITENTON: Moderator. Should Acme and Dudley Widget Companies both receive credit -- creditability. Remember, Acme was the one that was doing really well, gaining marketshare. Even though they were decreasing their intensity, they were in fact increasing emissions because they were growing and having more employees and a higher stock value and pension funds and paying more taxes and doing all those good things that we like.

Dudley, on the other hand, was crashing and burning because they just were inferior. And Dudley, should they get credits just because they're -- they're a poor performer.

Well, the industry reps at least agreed that the market will decide the value of a credit and the government should not attempt to determine creditability or value.

MS. EATON: In terms of protecting confidentiality, in many ways this was an extension of some of the earlier comments that Mark had raised. Confidentiality, credibility. There certainly is a tension there.

So there -- as mentioned before, concerns were expressed about confidentiality, especially if information was going to be needed to be reported at facility level or by a small company just with -- especially with one facility where a competitor could get a lot of information. And Freedom of Information requests, of course, were -- were cited.

And then the non-profits in the room primarily were the ones mentioning that transparency would be key to credibility and cited the fact that, especially when we were talking a little bit about the intensity versus absolute reporting issue, that if no -- if there is no absolute information reported -- let's say the numerator -- the denominator of that intensity measure. Therefore, it would be considered a lack of transparency and really wouldn't help accomplish one of the goals of this exercise, which is to enhance the credibility of 1605(b). So there was some conversation about that.

One of the solutions that was presented -- Cynthia Cummis from the EPA was in our group and did mention that one of the things that EPA has done historically with some of its programs is had a third party manage the information that companies file. And it provides some confidentiality protection to the participants. So she did cite that as some -- as a potential way out.

MR. WHITENTON: And others suggested that the -- that the FOIA issue needs to be addressed straight -- straight on, that perhaps if -- if it's not -- cannot be handled by regulation, something like legislation might actually be needed.

Then we sort of got into what sort of -- into the ether on the purposes of the 1605(b) program. Clearly, companies want to have meaningful guidelines so that they know what they're doing, they know what to expect. They would love to have -- some would love to have an incentive to

1 participate, and sufficient incentive would be being able to brag about the good things you're doing and  
2 have that -- "notoriety" perhaps is the wrong word. We mean in a positive sense, that you would be able  
3 to -- to say, these are the good things that we're doing, this is what we're -- show that to our stockholders,  
4 put that in our corporate reports.

5 There was some concern, particularly if you have a lot of companies in one industry  
6 reporting, that there's going to be some companies that are going to be prepared -- compared unfavorably.

7 And this is a natural consequence of this kind of a registry. Some -- one expressed -- one industry  
8 person expressed, you know, this could adversely affect one's stockholders, opinion of the company. The  
9 board might be upset by it. Wall Street. Your stock value might even change. That's all possible. We  
10 did not have a solution for that. That just sort of was there.

11 There was a consensus, however, that 1605(b) intensity reporting is not a useful tool. It  
12 cannot be aggregated to reach a national intensity level because that information, as was brought up in  
13 the discussion yesterday afternoon, is already available to EIA and EPA. And they do file reports that  
14 can easily indicate what the national energy intensity is by sector. Rather, what this would do for entities  
15 is to -- the ability to file by energy intensive measure as an individual company would allow the company  
16 to grow and still show that it's doing good.

17 Will 1605(b) provide protection for absolute or intensity reduction actions taken now.  
18 We did not -- that goes back to baseline protection. I don't think -- we've raised it but I don't think there  
19 was any clear answer.

20 MS. EATON: No, I don't think we had much consensus on that.

21 I do know that it was -- this was an interesting question for the group because as we were  
22 talking about the purpose the 1605(b) program, and we actually all got pretty clear at that point that this  
23 certainly -- none of this information could be added up to see how we're doing according to our national  
24 commitment that President Bush has made, that that is going to be a nationwide inventory assessment.

25 I think -- I think it certainly begged the question of, what is the relationship of this  
26 program, this registry, to the overall national target. And from the -- an environmental perspective, I just  
27 wanted to -- to bring up again that the -- if intensity information alone was submitted, there was concern  
28 that that would be of limited use to external stakeholders, that if that primarily serves to help inform the  
29 management of a company about how they're doing, that could really be done internally by the company.

30 What to do with baselines. We -- we didn't have group consensus on this. It was  
31 actually an interesting conversation because we -- we talked about some of the -- the THG protocol  
32 guidelines currently in effect where you adjust -- the historic baselines according to acquisition or  
33 divestiture activity but not for organic growth.

34 And actually, Gene had -- from Celanese had mentioned -- and we followed up  
35 afterwards to -- to flesh this out a little bit more -- that one of the benefits of intensity measures is that it  
36 could be a real -- real-time information, that if you do acquire a company, not only do you acquire the  
37 emissions but you acquire the production. And that simplifies your reporting of that intensity. You don't  
38 need to go back historically and adjust any information that you had submitted.

39 And of course, some argued no adjustment for organic growth if we're -- if we're doing  
40 other types of reporting.

41 And let's see. I'm not -- it says here, "Impact of other government regulations, actions  
42 required by other government regulations and how companies should account for that." I don't have  
43 much comment on that although it was -- it was an issue that was raised, a topic that was raised.

44 And I think that's the -- the extent of our comments at this point. Thanks.

45 MR. BROOKMAN: That last comment about other government regulations, that's the  
46 one we -- that we started off misconstruing yesterday, as I recall. And it was if -- as I understand it, if  
47 your company is required by other government regulations, you know, to -- to do something, how does  
48 that affect the baseline.

49 Did you -- did you not discuss that much?

1 MR. WHITENTON: We discussed it. We had no consensus. Some felt a pound was a  
2 pound. Others were worried about adjustments.

3 MR. BROOKMAN: Okay. Yeah, Rebecca?

4 MS. EATON: Yeah, so.

5 MR. BROOKMAN: Okay. Great. Questions, comments from members of that group  
6 first, and then we'll go to the larger questions. Yes?

7 MR. ALARCON: Carlos Alarcon, CO2 Financial. My concern, and perhaps I should  
8 have voiced it yesterday, was this business of the notoriety that was noted in your -- in your Power Point  
9 versus -- and in pretty much the same paragraph stakeholder and shareholder value.

10 One of the things that I've run into on -- on examining balance sheets and for exposure to  
11 CO2 emissions is while we may enjoy the green value, the notoriety, and the image, that the -- that the  
12 onus of CO2 emission exposure to stakeholders and shareholders is becoming increasingly apparent and  
13 they are increasingly concerned.

14 This is a business and a commercial position for -- for the entities out there. Whether  
15 you want to be registered here or -- or on your balance sheet, this issue is going to come up. And it does  
16 affect global companies and national companies. And however you care to deal with it, and I'm not  
17 trying to be -- it's going to have to be dealt with.

18 So I'm going to -- I just want to leave it with that, that there are, you know, sort of trade-  
19 offs with this reporting.

20 MR. BROOKMAN: It's a -- it's a new thing to be reported for many companies. And it's  
21 a different level of either prospective benefit or prospective exposure.

22 MR. ALARCON: Right. But --

23 MR. BROOKMAN: Both.

24 MR. ALARCON: But the line that runs through it, the thread that runs through it, is  
25 corporate responsibility, corporate governance, and material impact overall.

26 MR. BROOKMAN: Do you wish to follow on, Rebecca?

27 MS. EATON: This is interesting. I'm glad Carlos mentioned this because it was  
28 something that I -- I don't think we talked too much about yesterday although, certainly, to a little bit.

29 But I -- I wanted to mention just in a broader context that, certainly, I think something  
30 related to that is the increasing number of shareholder resolutions that are having -- people who are  
31 investing in companies want to understand the carbon risk that that company is taking on and putting up  
32 for vote questions about what the company's doing either to track its emissions, to reduce those  
33 emissions, or to invest in a cleaner energy portion of its portfolio.

34 So I think that's somewhat of a related element, that we are seeing movement on the  
35 financial front of what companies are doing, really, outside of this -- this context right here.

36 MR. BROOKMAN: And, Mark, do you want to follow on as well? No.

37 I note that the -- I note that the reporters from this group represent the kind of balance we  
38 hope to achieve in any dialogue that goes forward.

39 Please, go ahead. Follow on. And your name, for the record?

40 MR. STEADMAN: Yeah. Gene Steadman from Celanese, and I'll try to respond to  
41 Carlos's comments.

42 I couldn't be in more disagreement, actually. I feel or my perception is that the impetus  
43 on this overall area is actually decreasing for a couple factors. One is that it's very clear now in our view  
44 to the scientific community at large that the relationship that this might or may not have to global climate  
45 change is -- is -- is very uncertain, more uncertain than people would have believed just five years ago.  
46 The science is not there yet.

47 Second is that there are other companies or entities, countries, that have gone into this  
48 area based on the premise that at some point there would be a value, I guess, based on a -- on a constraint  
49 or a cap. And we've noticed that a lot of those trading schemes are collapsing, that it's all basically built

on hot air, pardon the pun. But that's about the way it is. So it's in the U.K., companies, countries, Australia, as they're all backtracking now as they realize that it's -- it's not clear at all.

On the other hand, we've recognized that financial markets do -- are starting to come out with indices on how well companies perform environmentally. But that's a real mix of issues dealing with the whole complex of clean air, clean water, Superfund, RCRA, the whole thing. And we believe in my company, and in fact the industry at large is doing quite well. But it's a whole index and not just this.

MR. BROOKMAN: Thank you.

MR. STEADMAN: Thank you.

MR. BROOKMAN: Yes. Follow on. Rebecca?

MS. EATON: I'm sorry. I can't help -- dive in here. I -- I'm sure you're not surprised.

MR. BROOKMAN: I thought there was a counterpoint coming.

MS. EATON: I just wanted to point out a couple just very briefly international trends that I think, Gene, it's important for Celanese to -- to factor in your future decision-making about valuing carbon.

At this point, in an unforeseen way 18 months ago, it looks like we are moving into a Kyoto Protocol world, whether that's going to be in the next 12 months, whenever Russia ratifies. And the EU is clearly acting as if it's under a Kyoto Protocol world right now. The emissions trading directive is going to be -- it's being discussed now. It looks like the Environmental Council and the EU is going to be meeting in mid December. Decisions are going to be made on that and that will go into effect in the 2004-2005 time frame.

And then of course, you can see it on state levels. We have two states now that have passed four pollutant electric utility bills managing CO2 emissions. California passed a clean car legislation this summer by the year 2009, managing -- regulating the output of cars based on CO2 emissions. Eleven attorneys general of different states spoke to President Bush earlier this summer about this.

So I think the drumbeat is just increasing and it's simply a matter of time at this point. I really think that companies that act now are going to be much better positioned competitively in this environment.

MR. BROOKMAN: Thank you. So we have a divergence of opinion on this point.

Yes, a follow-on in the back, and then to Janet. Your name, please?

MR. SKERNOLIS: Our reporters for our group --

MR. BROOKMAN: Please say your name for the record.

MR. SKERNOLIS: Ed Skernolis with Waste Management.

MR. BROOKMAN: Thank you.

MR. SKERNOLIS: Our -- our reporters for our group did an excellent job. I just want to make one minor clarification with regard to the -- the waste industry service sector.

There are -- in our comments on this yesterday, we noted there are certain things that are absolutely out of our control, especially in our transportation side of our business, because our emissions are so largely dictated by government regulations of engines and -- and fuel. But the gentleman mentioned that we had limited opportunities in some cases. That's what I want to correct.

We have extraordinarily good opportunities with regard to methane management at our fixed facilities and at our waste energy facilities and through our recycling programs. And I think, on the contrary, our options are not limited. They're -- they're -- they're quite -- quite excellent and they are very cheap emission reductions, as the marketplace has already found out.

MR. BROOKMAN: That's one of the challenges here, isn't it? I mean, among these six, there is a lot -- huge variation in terms of the kind of doability and the ease of capturing this.

Janet?

MS. RANGANATHAN: I think the science is very compelling, and I don't think I'm alone in thinking that. I think a lot of scientists believe that.

1 I think that we shouldn't judge emissions trading by the first few days. I mean, we're --  
2 we're at day one of a very long journey here and of course there are going to be false starts. But we're  
3 just getting started. It's difficult to do trading without actually proper caps, but we -- but there has been  
4 some of that.

5 If you don't like trading, there are a lot of complexities with trying to assign property  
6 rights. There are other, more effective mechanisms like upstream carbon taxes, for example.

7 MR. BROOKMAN: We won't even go there today. Miriam?

8 (Laughter)

9 MS. LEV-ON: This is Miriam Lev-On. Staying away of this discussion.

10 (Laughter)

11 MS. LEV-ON: I just wanted to get us back to the discussion of the intensity. And I  
12 think that it was correctly pointed out by the group that you cannot take the intensity that each individual  
13 company would report and aggregate it to a national intensity.

14 And I think that this is good, actually, because you need different measures of intensity.  
15 The intensity that companies would report primarily in the complex industrial arena would be linked to  
16 some physical index about their -- their output or their production capacity while the national intensity,  
17 the way it was defined by the president, is more linked to the -- to the GDP.

18 So -- so that's -- I think it's a good -- and it might be different procedures or mechanism  
19 that would be appropriate when you do the national intensity linkage to account for measures that  
20 companies are doing that are not reflected in the macro models that the EIA has.

21 And I'll throw just one on the table right now, which is a carbon capture and  
22 sequestration. When -- when companies -- they might be burning the fossil fuel which will get counted in  
23 the -- in the macro model for EIA in -- in estimating greenhouse gas emission for the entire country. But  
24 if the companies are putting in technology to capture this carbon effluent from the stack, separate it, and  
25 geologically store it, then it doesn't see the atmosphere. Then that somehow will have to be factored in  
26 into the -- the national account as well as the individual account for each one of the companies.

27 MR. BROOKMAN: Thank you. Kristin?

28 MS. ZIMMERMAN: Kristin, GM. The data confidentiality bullet kind of caught my  
29 eye because it cited the EPA programs offer a third party that can come in.

30 But I lend a word of caution. At least for us, GM and the Climate Leaders Program, that  
31 third party was a funded contractor to the EPA. So I don't know if there's much data confidentiality there  
32 that you can be protected of.

33 However, if I wanted to go about paying for that third party on my own, then I think I  
34 could protect the data that I'm submitting.

35 MR. BROOKMAN: And the way they differentiated that between facility and project  
36 level on up to the entity level, you agreed with those comments as well? Yes? Okay.

37 Okay. Yes, please. Follow on. Reid Harvey.

38 MR. HARVEY: Reid Harvey with EPA. I just wanted to say I think the example that  
39 Cynthia was referring to is the semiconductor industry. And I believe that it's a law firm that the  
40 semiconductor industry works with.

41 So I don't know the discussion but that was the specific --

42 MS. ZIMMERMAN: Okay. That's -- that's fine. But for some of the other industries  
43 that were reporting, I know that we kind of used what was made available. And GM was, I believe, the  
44 first company to sign up for Climate Leaders and the first company to commit to a specific target.

45 MR. BROOKMAN: Reid's comment I'm not sure got on the record. I saw the guys in  
46 the back kind of -- so -- his comment was that the specific situation that was being referred to by Cynthia  
47 from EPA was that it was a semiconductor industry and it was a law firm that was capturing that -- was  
48 the third party data collector.

49 Okay. Is that right? Yes.

Other comments following this good report-back? Yes, please, Bill? Bill Fang?

MR. FANG: Bill Fang, Edison Electric Institute. On the issue about emissions intensity and who chooses the output measure, our -- our industry would certainly favor companies versus DOE or trade associations. As I mentioned yesterday, there are at least four different intensity metrics that could be used in our industry. And I think from the graphic that was shown up -- put up that, you know, there are a lot of different -- emissions intensity measures that could be used in different industries. So you know, companies need some flexibility, reporters need flexibility in that area.

On the confidentiality point, I think we have concerns about both of the so-called solutions that were suggested in terms of a third party manager or some amendment -- legislative amendment or FOIA amendment.

I'd like to point out first that the statute clearly provides for FOIA protection and incorporates an exemption under the Freedom of Information Act. That's in 1605(b) currently, which should be sufficient in combination with, you know, proper application of the DOE regulations.

Secondly, the, you know, solution that we talked about yesterday we think is perfectly suitable, which again, just to repeat for the record, a reporter marks its data as confidential. DOE notes that. If someone seeks that confidential data, then the reporter has a choice of either going into court, filing a reverse FOIA suit to protect the data, or withdrawing the data.

MR. BROOKMAN: Okay. Thank you.

Other comments, questions on that report-back?

(No response)

MR. BROOKMAN: Thanks very much. That was well done and high tech for this group.

Who wants to go next?

AUDIENCE MEMBER: Will those slides be put into the record?

MR. BROOKMAN: Will those slides -- I -- they were derived here at -- yes, they will, is the short answer.

AUDIENCE MEMBER: Thank you.

MR. BROOKMAN: You're welcome. Who wants to report next? Small Industries? Okay. I've got a microphone you can use.

(Pause)

MS. ZIMMERMAN: Is this like karaoke?

(Laughter)

MS. ZIMMERMAN: Small industries -- I mean, somebody must have thought this must be a small group or something to gather because there were only about six of us in the room. But --

MR. BROOKMAN: I'm going to move you forward here, like this. There you go.

MS. ZIMMERMAN: We had fun. A lively discussion.

And we spoke to issues that are on page 13 of the annotated agenda. And we really summarized it in four bullet areas, so this is going to be very, very informal.

But citing the issue on page 13, if you want to turn there, small distributed sources, residential and commercial buildings. It also included transportation. That's why I think myself and my DaimlerChrysler colleague was in the room.

But the question was, because it's unlikely that individual households or small and medium-sized businesses will choose to report directly their emissions or emissions reductions, how might 1605(b) kind of help them out, give them incentive to do so.

So some of the summaries here, should DOE recognize the small emitters, give them some incentive to report for vehicles, appliance manufacturers, home manufacturers. They might -- may want to claim credit for efficiency improvements beyond the standards that are set forward. And we believe that the 1605(b) should be flexible enough to offer those small emitters to sign up, to show some progress, and not necessarily just on the notoriety piece, that there might be a delta in there, especially in



1 the home-building sector.

2 We spent a lot of time speaking about the choice of materials that you might use. There  
3 is a choice up front. And the builder has that choice in many cases. Yes, there are other cost issues, but  
4 there are some very environmentally benign materials that can be used. So maybe they should get credit  
5 for that if they want to take the time to put it into an inventory.

6 Second issue here. If emission reduction credits are given to certain product  
7 manufacturers or builders, how could there be some assurance that the resulting emission reductions are  
8 not also being claimed by the users of these products or buildings. So again, like the double counting  
9 issue.

10 End users may or may not -- may or may not want to be interested in credits. Contractual  
11 agreements may be needed to avoid double counting. So there's one of the common threads. I heard it  
12 from Paul and from others. On the double counting issue, if you're upstream and you want to -- say  
13 you're the -- the electricity provider and you want to claim some credit but also the downstream user  
14 wants to claim credit, go offline and create some kind of contractual agreement that determines -- pardon  
15 me -- that one party will take 30 percent of that total credit and the other 70 percent. Go offline, create  
16 some kind of MOU or contractual agreement on what you're going to submit.

17 It's a new and open communication technique that we're not currently using, but it should  
18 be perfectly acceptable, okay. And that, we believe, that openness and contractual agreement idea might  
19 take care of the double counting issue.

20 How might the emission reductions associated with energy efficient products or vehicles  
21 or buildings be calculated. There are some calculation techniques that we might use. But in most cases,  
22 it's really complicated. There are a lot of different factors that can be used and a lot of different  
23 situations where they might be used. So -- and there are also some inaccuracies we've got to be careful  
24 with.

25 It's very complicated because a manufacturer makes a product and the user determines  
26 what and how it is used. So something like this on the product use phase or way up front phase for the  
27 manufacturer should be optional for the manufacturer or entity reporting.

28 Some particular parameters we might use. Vehicle calculation for the OEM or the -- the  
29 manufacturer, original equipment manufacturer. For vehicles, we would probably tend to want to report  
30 the performance of that new vehicle that's going off the line. And that would be in grams CO2 per mile.

31 For the consumer piece of the vehicle use phase, it would be total fuel used. And that  
32 would be, we believe, the most accurate assessment of CO2 emissions.

33 The appliance industry. Intensity or some kind of a sales metric would probably be used  
34 for the -- the appliance piece of that.

35 The last issue here, many products, vehicles, and buildings are subject to minimum  
36 efficiency standards set by the federal, state, or local governments. Should manufacturers or builders be  
37 given credit for emission reductions that result in such standards.

38 This is a tricky one, again, because we got into the issue of federal requirements versus  
39 state level mandates, state level registries, whatever. Standards that are coming up. We supported this  
40 particular issue saying that large owners have greater interest in credits than your small individual  
41 owners. Well, that should make perfect sense. There's probably greater deltas with the large owners of  
42 entities.

43 But there's an issue of optimization, and it's not just for freight transport but for other  
44 specific use. Let me give you an example.

45 In this freight transport issue, a duty cycle, a loaded aircraft goes from point A to point B  
46 fully loaded. It would behoove that freight provider to make sure that their duty cycle on the way back is  
47 also loaded with something else. Now, it might be people on the way out, but on the way back, they want  
48 to optimize their cycle. And they can optimize their cycle as well as optimize the size of aircraft that  
49 they're using.

1 So if they started out with a booming economy and had very large freight transport  
2 systems and now realize that they don't need that size anymore, they can downsize. Should they get  
3 credit for some efficiencies that they're working into their system.

4 Same thing with housing. Moving from, you know, building large, spacious areas into  
5 more efficient areas. So optimization should be -- that -- that category should be offered and made  
6 available to folks that want to report on the delta that might occur for the building industry or what other  
7 type of small or medium-sized provider.

8 So that's what we covered on small and distributed sources. Now I offer it to the other  
9 six folks that were in the room. Was there any other comment that you can help me out with?

10 Arthur, you were there too so don't be shy.

11 MR. BROOKMAN: Other -- other comments? Did other people want to -- yeah?

12 MS. ZIMMERMAN: The fact that we didn't have a whole heck of a lot of folks in the  
13 room, I don't think it was very contentious.

14 MR. BROOKMAN: And did you weigh in on the indirect and direct issue for this?

15 MS. ZIMMERMAN: This we would consider more of the direct, the grams CO2 per  
16 mile --

17 MR. BROOKMAN: Uh huh.

18 MS. ZIMMERMAN: -- piece. But was that your question?

19 MR. BROOKMAN: Yes, that was -- yeah.

20 MS. ZIMMERMAN: Yeah. And for the -- for us, the OEM, let's say, this consumer  
21 piece would be the indirect piece, but for the consumer, of course, it's their direct piece.

22 MR. BROOKMAN: Right.

23 MS. ZIMMERMAN: And they may want to choose to track something like that. They  
24 buy an energy efficient vehicle and they keep their fuel receipts and, you know, this is what I'm doing  
25 because I could have bought, you know, another product --

26 MR. BROOKMAN: Right.

27 MS. ZIMMERMAN: -- purchased another product.

28 MR. BROOKMAN: Right. Okay. Paul, do you want to -- yes? Follow on.

29 MR. CICIO: Paul Cicio, Industrial Energy Consumers of America. We would disagree  
30 with the -- with what we heard on one part about where if you were a -- a consumer and you were able to  
31 reduce your electricity consumption and possibly there -- what you had -- the group had suggested is you  
32 negotiate with the utility to split it up, 30 percent to them, you know, 70 percent to us, and so forth.

33 We would strongly disagree and discourage that. We believe that it's paramount that  
34 1605(b) have very specific guidelines as possible to remedy and dictate how those decisions will be  
35 made. You cannot leave that to a negotiation.

36 I have had 20 years of commercial contract responsibility, and -- and that's a nightmare.  
37 Don't go there.

38 MR. BROOKMAN: What kind of --

39 MR. CICIO: Let the guidelines define it.

40 MR. BROOKMAN: Be specific about the kind of guidance that you would see the  
41 Department give in that case.

42 MR. CICIO: Well, I mean, simplistically, something that we talked about yesterday is,  
43 on a subject like that, the entity who spends the capital, who makes the investment, should get the credit.  
44 I mean, it's -- that is a fundamental aspect of who should get the award.

45 MR. BROOKMAN: Okay. Janet, follow on, and then to Miriam.

46 MS. RANGANATHAN: I totally agree with Paul on this point. I think --

47 MR. BROOKMAN: Janet, you need to speak louder, please.

48 MS. RANGANATHAN: I agree with Paul on this point. I think it's going to be very  
49 difficult to negotiate and organize all these contractual arrangements. It'll be a legal nightmare.

1 Furthermore, there are going to be many situations in which the person who owns the  
2 direct source, perhaps it's a -- say I put a -- on my roof. The electric -- electric generator is in a business  
3 that's declining. There's absolutely no incentive for him to want to sign over those reductions to me.

4 So I agree with Paul that the -- the policy-makers will have to assign some responsibility  
5 here based on who makes the investment.

6 MR. BROOKMAN: Who makes the investment. Okay. And yes, follow on. Yes?

7 MS. ZIMMERMAN: Just as a follow on, I see it --

8 MR. BROOKMAN: This is Kristin.

9 MS. ZIMMERMAN: Oh, sorry. Kristin, GM. Might there be a way to do both? Okay.  
10 I'm trying to think here on my feet.

11 Indeed, the individual entity making the investment, you know, is the direct piece and  
12 they should get the credit. But the -- what I'm suggesting is that guidelines be flexible enough such that if  
13 I am the purchaser of that direct investment and they get that credit, I do something quite different with  
14 the purchase once I get it and I make it even more efficient. Should I get no credit for that.

15 Well, golly, I don't know how to really handle that. Any thought? Did you follow my --

16 MR. BROOKMAN: I'll let Janet follow on again.

17 MS. RANGANATHAN: That would just be a second investment. You would make  
18 your case for the piece that you added onto it.

19 MS. ZIMMERMAN: Okay.

20 MR. BROOKMAN: Okay. So we have one major plank in this right now.

21 Miriam, and then I'll go to this gentleman here. If we could be brief? Several people  
22 wish to speak.

23 MS. LEV-ON: Yeah. This is Miriam Lev-On. I haven't heard any discussion about,  
24 when you talk about small distributed sources, about how to treat local -- local, state, and federal  
25 government installations which are, in a way, also maybe sometimes not small but distributed sources.  
26 And they have a lot of things in common as far as office buildings. And they have fleets of cars.

27 And one issue that I specifically wanted to raise, and I don't know that I have a solution  
28 for it, is there might be some fuel switching, especially in fleets of cars, because of other environmental  
29 concerns right -- right now, the movement in some places to switch from diesel to natural gas, where you  
30 actually lose the greenhouse gas advantage because natural gas has much more greenhouse gas emissions  
31 than the equivalent newer diesel vehicle.

32 How does this get treated? Do you get a penalty or does it show as an emission increase?  
33 Did you try to think about how to handle this kind of -- of fuel switching, especially by large fleets?

34 MS. ZIMMERMAN: This is Kristin again. We did not go into much detail on fuel  
35 switching. However, we did discuss somehow accommodating to the delta that would be made to the  
36 state level standard. Any delta, any change greater than or less than.

37 MR. CAINS: I'm Mike Cains with the Logistics Management Institute. I was part of this  
38 -- this group. And Kristin has done a nice job of summarizing, but let me just add one or two things to  
39 what I think we -- we said yesterday.

40 The first question, the -- the thing that set us off was, if a manufacturer makes an  
41 innovation that reduces greenhouse gas emissions from the product, an energy efficiency improvement,  
42 and he's selling to huge numbers of very small consumers who probably are not going to be claiming the  
43 credit, then should the manufacturer be able to claim credit for the innovation.

44 And I think the consensus -- at least my understanding of the consensus of the group was,  
45 generally speaking, yes, that he should be able to do so.

46 But then we got into the question of, sort of how would you measure the -- the gains.  
47 And Kristin made the point that different users use products differently. And there were a number of  
48 different suggestions on this. One was, you kind of have an average use. So if it's, let's say, a  
49 dishwasher, you kind of have some estimate of what the average number of cycles might be in a year and

1 you just apply that in some kind of a standard or norm or average like that is used.

2 And then there was this question about, what if the consumer of the product also wants  
3 to claim the credit, and then that's where we got into the notion of, well, maybe you have to work that out  
4 contractually as to who should get what part of the credit.

5 And then the last question was, well, what if government has required some kind of an  
6 increase in the efficiency of products, let's say of washing machines or whatever it might be. Then,  
7 should that still count if the manufacturer goes ahead, makes the investment and improves the product,  
8 and puts it on the market. I think there was kind of no consensus on that question. Some of us felt that,  
9 yes, you know, if the improvement is made, the source of it and the intent is not the -- not the question.  
10 But others felt that that's a different situation and that perhaps that should not be counted.

11 So that's at least my understanding of some of the things we discussed.

12 MR. BROOKMAN: Yes? Paul and then to the end. I saw you over there, yes. Go  
13 ahead, Paul. Bill. Bill Fang.

14 MR. FANG: Bill Fang, Edison Electric Institute. I wanted to respond to some comments  
15 that Paul Cicio and Janet Ranganathan made.

16 In terms of investments in -- in equipment and appliances and so forth, certainly utilities  
17 have invested money in DSM and in renewables, whether it's solar PV or distributor resources and so  
18 forth. So I think it's far better to let the reporting entities decide for themselves or work out among  
19 themselves by negotiation or contract how those credits would be split up rather than having DOE  
20 involved in that. You know, as a last recourse DOE might have to step in and -- and referee some kind of  
21 dispute over credits, but that should be the last resort rather than the first resort. Far preferable that the  
22 entities work that out among themselves if possible.

23 And contracts, this is not a legal nightmare. Contracts are -- are arranged in the course of  
24 business and commercial discourse every day. That's -- so legal nightmare is just incorrect. That -- that's  
25 not going to be a problem.

26 MR. BROOKMAN: I'm going to follow on there, please. Go ahead.

27 MR. CUNNINGHAM: Dan Cunningham, Con Edison. I would agree with Bill. You  
28 know, the farther -- farther DOE can stay away from the -- the responsibility, it's just like the rates. The  
29 farther away DOE can stay away from that, the better it's going to be for the whole program.

30 The primary responsibility, as I see it, for DOE is to make sure that there -- there are  
31 enough checks and balances in the reporting mechanism to make sure that there's not double reporting.

32 MR. BROOKMAN: Thank you. Lee Ann?

33 MS. KOZAK: Lee Ann Kozak, Southern Company. I'd like to suggest that there's really  
34 two sets of issues wrapped up in the discussion that we've had here. The first is the idea of small  
35 distributed sources. And how those are treated is really a matter that affects entities of all sizes.

36 You couldn't -- I mean, for example, the vehicle example. Yes, it's an issue with the  
37 small entities. But the vehicles and those types of sources are also very difficult issues for large entities  
38 as well because they are small distributed. So that's really one set of issues that DOE needs to deal with.

39 And the second one is the notion of the small entity, which is somewhat different.

40 MR. BROOKMAN: Okay.

41 MS. KOZAK: So I just make that observation and, you know.

42 MR. BROOKMAN: That's helpful. Yes, Rebecca? I also saw, I thought, somebody else  
43 over in this range here.

44 MS. EATON: Hi. I just wanted to -- Rebecca Eaton, WWF. I just wanted to make a  
45 comment about product reductions and the accounting for that, some of the potential credibility issues I  
46 see with cherry-picking on this. And of course, cherry-picking is one of the issues that undermine some of  
47 the credibility of historic 1605(b) filings --

48 MR. BROOKMAN: Rebecca, say what you mean by "cherry-picking." I think  
49 everybody understands that.

MS. EATON: Cherry-picking is selective choice so that -- here's an example -- that if a company, let's say, would like to get credit for reducing the emissions from a new line of automotive vehicle and they want to selectively get credit for that emission reduction from a new high efficiency vehicle, that's pretty selective if that company is not willing to measure and report the carbon footprint of its overall product portfolio.

Another example is when an oil company would like to get credit for the emissions reductions associated with a high-performance synthetic lubricant that would be put into, let's say, the whole edition of a new model year of vehicles. So they want to have the emissions reductions associated with the increased efficiency reduce greenhouse gases associated with the increased car performance from using that synthetic lubricant, yet that oil company is not willing to measure and report the overall carbon footprint of its product offering.

So I just want to advise, I think it does start undermining the credibility of this initiative.

MR. BROOKMAN: Thank you. Did I see somebody else who wanted to comment on this subject? Oh, yes. Thank you. Paul?

MR. CICIO: Paul Cicio -- Paul Cicio. Just to follow on to my comment and Bill's.

I think that your -- the comment that was made regarding DSM is -- just proves my point. If the utility spends the money for demand site management, they should rightfully get the credit.

MR. BROOKMAN: And I appreciate -- I appreciate, Kristin, you cuing up one of the first common threads that is -- that has been developed. And I would note that we've got divergent viewpoints on the issue of double counting.

I have to say, as I think about DOE, all four of the agencies but particularly DOE, and I think about EIA, wearing my -- the hat that I keep trying to discard which is as a former econometrician, as I -- as I sort through these issues I have nothing but empathy for the task here.

(Laughter)

MR. BROOKMAN: Because there just -- as I -- as I try and stack and rack how this might look, it just keeps getting increasingly complicated, right? Anyways.

Who's -- who is the last group to -- yes? David.

MR. FINNEGAN: Dave Finnegan, Mayer, Brown, Rowe, and Maw.

I just wanted to mention that in the -- in the present statute which we're operating under there's a lot of provisions on energy efficiency, appliances, vehicles --

MR. BROOKMAN: Right.

MR. FINNEGAN: -- and so forth. And the encouragement for industries is to buy those -- those appliances, et cetera, and others and to -- somebody wants to get credit for them. So it seems to me, does the manufacturer get it or -- you don't want to make this program so difficult for reporting those credits from the same statute from which you're operating to encourage all that.

MR. BROOKMAN: Thank you. Thanks very much.

Let's have the last report. Who's -- yes?

(Pause)

MS. HAWES: Ellen Hawes from The Nature Conservancy and Amy Schaffer from Weyerhaeuser Company. We're reporting on Agriculture and Forestry Sequestration breakout group.

And one of the main themes that came up again and again is what can be measured and what should be measured in these projects. And we feel that quantifying the actual amount of carbon that's in the trees and in the soils in these projects can be measured. There's a wealth of data and experience over the past decade in doing this. You know, there's a need to design proper accounting rules and standards for measuring and verifying. But it's not really an impediment in these types of projects.

The second part -- the larger issues of what should be measured, and we discussed leakage, permanence, baselines, and cobenefits. These are issues that affect the total amount of carbon that can be claimed from the project but are a little more complicated to measure.

1 First of all is leakage. There's a -- there's a few different types of leakage. The agenda  
2 directed us to talk first about what we call internal leakage, which is within the entity. Is something that  
3 the entity is doing elsewhere offsetting what they are reducing with the project.

4 For example, you can look at a farmer. They're doing conservation tillage on one part of  
5 the farm and then they're, you know, then going and increasing production with regular techniques on  
6 another part of the farm. Is -- is that offsetting what they should be able to claim.

7 And I think there was -- where there was consensus, we kind of agreed this definitely  
8 does need to be dealt with. And we feel like it wouldn't be that complicated to deal with.

9 Certainly, if you do something like entity-wide reporting, that could take care of it. Also,  
10 it could be looked at more with project boundaries and baselines. You know, look how -- you know,  
11 maybe doing a larger project boundary, what you're actually looking at in the project.

12 But this -- you know, this needs to be tracked and we feel that it wouldn't necessarily be  
13 that complicated to track it.

14 Then, when you start talking about external leakage, which is activities outside the  
15 project boundary and outside the entity that could be offsetting the reductions you're claiming. That is a  
16 little more complicated to quantify.

17 The first -- the first subset of that is -- we call primary leakage or activity shifting, which  
18 is, say you're going to be reforesting a certain area so you're buying out a farmer. Now that farmer is not  
19 in your entity or in the project but they can go out and plant -- you know, plant crops or clear more land.

20 I think it's important to -- to look at that and to track that. I don't think there was a  
21 consensus in your group if you should be responsible for that or not. There wasn't, obviously -- you  
22 know, as The Nature Conservancy, we believe that you should have to look at that and it's maybe -- you  
23 know, it's possible to track that also. But certainly, there wasn't a consensus.

24 And then, there was even less consensus when you talk about larger market leakage,  
25 which is, are there -- you know, not the direct act, are they going out and increasing production  
26 elsewhere, but are there market effects, price effects, from taking land out of production that could  
27 incentivize increased production elsewhere.

28 That becomes very complicated and expensive and difficult to quantify. And there has to  
29 be -- you know, decisions to be made on where is your boundary for analysis. Are you looking at price  
30 effects over the globe, within the state. What region are you looking at.

31 So yeah, that is more difficult. There are several -- there are several ways, I think, to  
32 deal with it in the project design phase. I know in the WRI protocol one of the things they've been  
33 discussing is project typology, looking at different types of projects and maybe identifying issues -- the  
34 leakage issues that might be raised and maybe saying, you know, certain projects are more high risk for  
35 leakage than others and perhaps kind of steering you away from those projects.

36 Also, The Nature Conservancy has looked at doing sort of decision framework. So as  
37 you're going through the project design phase, you can identify where the leakage might occur and then  
38 come up with some plan to deal with the leakage.

39 Therefore, you can, you know, hope to avoid -- avoid leakage in the first place by  
40 coming up with a smart project design rather than having to go later and try to quantify what the leakage  
41 effects of your project are.

42 So those are -- those are the different issues we talked about with leakage. And again,  
43 just to mention, there -- there wasn't a large area of consensus on what the project should be responsible  
44 for.

45 The second issue is permanence. Because of the nature of carbon sequestration projects,  
46 the carbon that's stored can be released later into the atmosphere.

47 I think, you know, what we decided is, to a certain -- to a certain extent, if you're talking  
48 about a creditable system, the market can take care of some of that. It's kind of an issue of liability for  
49 the credits. You know, if you're reporting a credit, you -- you know, you're responsible for making sure

1 this credit actually exists. And if something happens later and the carbon is released, you should be  
2 responsible for either, you know, replacing it with other credits or, you know, or replanting the trees,  
3 something like that.

4 You know, as long as the crediting system assigns you the responsibility to make sure  
5 it's, you know, a real credit, the market can assign different -- you know, who's responsible for the  
6 liability. Is the buyer, the seller. Those are things the market can decide.

7 As far as just, you know, the registry, at this point we're just registering the reductions in  
8 1605(b). I think it's just tied to reporting. If you're reporting each year on the credits from a project, you  
9 obviously have to report if something happens to them and they're released into the atmosphere.

10 Then, baselines. You know, that's -- baselines is another issue. I think there's a lot of  
11 different technologies and methods for projecting baselines for -- for land use projects. And that's  
12 something, I think, that can be dealt with also when you're making up the accounting rules, is just to look  
13 at these different methods and make a decision what -- what is maybe the most credible method. But  
14 certainly, it's important -- it's important when you're trying to claim the amount of reductions from your  
15 project to have an accurate baseline of what would have occurred else -- otherwise.

16 And the fourth issue is cobenefits. I think it's a concern for a lot of stakeholders and land  
17 use projects that these have, you know, other environmental cobenefits. There's definitely a large  
18 opportunity for water quality and biodiversity cobenefits from these projects.

19 But again, there wasn't any consensus that at this point you should be either required to  
20 measure these and probably not for credit.

21 But -- so I think at this point the consensus was, you know, maybe that's something if the  
22 project developer feels like they want to try to quantify that, you know, that's just -- that's an additional  
23 benefit from the project they can -- they can talk about but it shouldn't necessarily be tied into a carbon  
24 credit or the registry at this point.

25 And I'd just like to bring up something that I was bringing up a lot, is, okay, maybe you  
26 don't quantify the cobenefits, but certainly there should be some sort of environmental safeguards that  
27 these forestry and agricultural projects aren't having a negative environmental effect as far as water  
28 quality and biodiversity.

29 And then the third -- the third issue that we brought up is timing of credits. These type  
30 of projects tend to have high up front costs and the credits are accruing over a long time period. So I  
31 think some project developers were interested in seeing if there was any way to claim all of the credits up  
32 front and then, you know, you have the responsibility to make sure these credits actually occur. But  
33 trying to -- you know, in the -- in one year saying, well, we have all these credits over the 40 years of the  
34 project.

35 That was just something that -- that was brought up but I don't think we necessarily  
36 agreed that that would be possible. But it's something to look at when we're talking about these projects  
37 just because I think it's a unique issue -- issue that a lot of the project developers are concerned about.

38 And now, for the second half of the discussion, I'll pass it over to Amy.

39 MS. SCHAFFER: Thanks, Ellen. There were just two comments I would make in terms  
40 of concepts. One is that there was definitely -- there were definitely similarities between the agriculture  
41 and forestry sequestration concerns. There are also in terms of practical nature differences, and we  
42 probably are going to need to look at them differently on some areas and yet in the same. For instance,  
43 soil carbon measurement can be done similarly regardless of whether you're dealing with forestry or  
44 agriculture. So there were things that were -- thanks.

45 We did also sort of go through and talk about what the priorities would be in terms of  
46 how do we address sequestration. And we -- one of the -- and -- and how it would get involve -- sort of  
47 integrated into the 1605(b) registry.

48 And I think that, more than anything, a lot of the questions that we raised that Ellen  
49 articulated in our group can be answered depending upon what the goal of the revised 1605(b) registry is.

1 And if indeed it is a -- merely a registry of reductions, then some of these things are -- may be more  
2 complicated than others.

3 Similarly, if it is to establish a system for identifying credits, then other things may be  
4 easier or more difficult to address.

5 So we realize that this is a very important issue that DOE and perhaps all of us need to  
6 respond to overall.

7 This goes very much back to the question of, is this a creditable reporting system versus  
8 a reporting system of reductions. And there was, I think, consensus among our relatively small group --  
9 we were about 10 people, excuse me -- that, yes, if -- that it is possible to use sequestration as a creditable  
10 reporting -- as part of a creditable reporting system. And certainly, if you were doing credits, that it  
11 should be incorporated into it.

12 The second is, the recognition that it's really important to keep the quantification not  
13 only credible -- that is, truly understandable scientifically and technically based -- but simple. And there  
14 was, as Ellen said, agreement pretty much among all the participants that there are a sufficient amount of  
15 experiences both in the agriculture and -- I'm losing my voice. Excuse me -- agriculture and forestry  
16 communities to be able to measure the quantifications relatively easily.

17 And last -- lastly is figuring out what do we mean by baselines, which is very difficult  
18 when you're talking about a forestry or agricultural situation. Perhaps more so on agricultural situations  
19 because you've got this turnover of agriculture much more quickly, obviously, than one would have of a  
20 forestry situation.

21 So those are the priorities and things that we would think need to be developed if you are  
22 including sequestration in the 14 -- in the 1605(b) program. And I'm now losing my voice.

23 MR. BROOKMAN: Questions, comments based on that report-back? Yes, please?

24 MR. STEADMAN: Gene Steadman, Celanese. I've always been curious about these  
25 types of activities and the liability of it.

26 And the case that comes to mind is a Japanese company bought a huge coal contract  
27 from a company in Australia. And along with the coal contract they apparently acquired emission credits  
28 based on plants that somebody in Australia had planted along the sea coast, apparently to sequester  
29 carbon.

30 And my -- I've always had this nagging thing. If that were me entering on that contract  
31 and a bolt of lightning came down and set the bushes on fire or the water came up and it flooded the --  
32 the bushes and none of this happens, who's liable? Is it the government? Is it the company that sold it?  
33 Or is it the company that bought the product? Did you get any -- any of that thing?

34 For example, you talked about trees being more stable. And I keep thinking of all the  
35 forest fires. And if you plant these trees and they all burn down, who's got that liability? In the world of  
36 business, that's a huge --

37 MR. BROOKMAN: We could expand the range of this workshop to include liability  
38 now. Oh my God. I thought we were in trouble already.

39 (Laughter)

40 MS. SCHAFFER: Yeah, we did actually talk about this. We talked about it --

41 MR. BROOKMAN: So be brief.

42 MS. SCHAFFER: -- in terms of -- of permanence. And it's when Alan talked about the --  
43 - the marketplace will be able to address it in terms of when you do a contract you assign liability. And  
44 either the person who is buying the credit will maintain the liability of maintaining that -- that activity  
45 that allows the credit or the person who owns the, you know, the piece of forest land, even though they're  
46 selling the credit, may retain liability for doing it.

47 There will be times when that doesn't work, and there needs to be some clarification on  
48 how that works.

49 It's -- it's our opinion that -- it's Weyerhaeusers' opinion that the markets will be able to



1 bear. I'm not sure that -- but I think that there was actually consensus about that.

2 Ellen, did you want to add anything?

3 MS. HAWES: Yeah. I would just agree. I mean, I think whoever -- whoever is buying  
4 the credit and then claiming it for whatever purpose, the government is of course going to have, you  
5 know, have some liability that that's an actual credit.

6 Now, they can -- I think, you know, the markets can work out whether they assign in  
7 some contract that, you know, whoever is supplying them with a credit then also shares some of that  
8 liability. I think that's something that they can work out when they're buying the credits.

9 MR. BROOKMAN: So permanence is a useful concept in this respect.

10 I saw Janet first, then Rebecca.

11 MS. RANGANATHAN: Janet -- Janet Ranganathan, WRI. Just an observation and then  
12 a comment. Most of your discussions seem to focus on the accounting issues related to projects rather  
13 than entity scale reporting.

14 And then, secondly, an observation that I wanted to make that came out in your  
15 discussion was, I think it's really important that we design the accounting and crediting system in an  
16 even-handed way. So today we've talked a lot about -- even-handed in terms of how we deal with  
17 positive effects and negative effects of projects or actions.

18 Today we talked a lot about assigning rights to -- to indirect emitters based on action  
19 they take. And I think this is sort of parallel here between the issue that you talked about in relation to  
20 activity shifting. If -- if -- if you actually take a forest, for example, and you preserve the forest and some  
21 loggers move somewhere else, are you -- we talked -- I mean, should you be assigned responsibility for  
22 those negative effects even though they're not your actions. And if you -- if you've acted in good faith  
23 and designed as best you can into your project methods to deal with those, should you be responsible for  
24 the activity shifting.

25 And a parallel on the emissions side is the U.S. steel industry becomes very energy  
26 efficient, and steel moves to developing countries and creates lots of pollution there. Should the --  
27 should the iron and steel industry be responsible for that?

28 So I'm just saying there's a little bit of a disconnect here and we should be very even-  
29 handed.

30 MR. BROOKMAN: Yeah. You're raising a host of issues that I'm not going to ask these  
31 folks to address at this point.

32 Rebecca? Good points.

33 MS. EATON: Rebecca, WWF. Amy can answer this real quickly.

34 I think on an international framework, because of some of the permanence issues and  
35 uncertainty around carbon sequestration investments, are those considered discounting credits compared  
36 to actual emission reductions?

37 MS. SCHAFFER: I have to tell you I don't know, Rebecca.

38 MS. EATON: Okay.

39 MS. SCHAFFER: We could talk about it and I can find that out for you, but I don't  
40 know.

41 MS. EATON: Okay. Because I -- this isn't my field at all, but I do know that I've heard  
42 that term used a lot around carbon sequestration, was discounting the value of the credit slightly  
43 compared to very verifiable, clearly permanent --

44 MS. SCHAFFER: I actually think that there is some discounting, that it is -- you know,  
45 now that I think about it, I remember something very briefly talking about it, so.

46 MR. BROOKMAN: Yes. I see two more -- yes, first?

47 MS. WILSON: Cindy Wilson from Catalytics. I've just closed one of these deals. And  
48 it basically depends on how the deal is structured what the assurances, if the trees will be grown, whether  
49 the land was pasture in 1989. And as you know, the full set of rules will be established supposedly in

1 COT 9. And there is variation in the pricing within sequestration credits.

2 But the more conservative you are in trying to adhere to what people guess are going to  
3 be the rules, the higher the price.

4 MR. BROOKMAN: Interesting. Thank you.

5 Yes, please. Find a microphone. Your name for the record?

6 MS. FORBES: This is Sarah Forbes from the National Energy Technology Laboratory.  
7 And just in response to Janet's comment, although in the presentation we -- Amy and Ellen focused on  
8 project-based scales, we did devote a bit of discussion to the fact that it's -- with trust real sequestration,  
9 it's easy to picture a project because you're talking about a specific piece of land. But the entity-wide and  
10 project-based issues are the same.

11 You could have individual farmers reporting or cooperatives reporting, and you could  
12 also have, you know, a large paper company or an individual paper mill.

13 So some of the issues are very similar but it's just easier when you're thinking about a  
14 chunk of land to picture a project.

15 MR. BROOKMAN: Please, yes?

16 MR. JONES: Russell Jones, American Petroleum Institute. We've made passing  
17 reference to it before, but we think there's a big gap in the 1605(b) guidelines that should be corrected.

18 It covers -- gives the examples and methodologies for dealing with agriculture and  
19 forestry sequestration, but it says nothing, effectively, about geologic sequestration.

20 For those of you who don't know, carbon dioxide is found in geologic formations.  
21 Sometimes when you go searching for natural gas, you unfortunately come up with carbon dioxide and  
22 not methane.

23 So it's -- it is a natural element down in the -- in the -- in the geology, sometimes called  
24 subsurface sequestration.

25 MR. BROOKMAN: And it's not -- it's not an aspect of the present program. The present  
26 1605(b).

27 MR. JONES: It should be.

28 MR. BROOKMAN: And it is not presently.

29 MR. JONES: It is not. It is not specifically acknowledged. Someone might be able to  
30 try to make a case under the category of "other" in the discussion of sequestration. But --

31 MR. BROOKMAN: I'll let Paul respond briefly, then I'll return.

32 MR. McARDLE: Yes, Paul McArdle, EIA. Yes, you could -- I don't recall ever getting  
33 a project submitted to us that dealt with geological sequestration. It could -- yes, it could be done under  
34 the "other" category, but I do not believe we have a specific project type for geological carbon  
35 sequestration at this point.

36 MR. BROOKMAN: Okay. So, Russell, keep going.

37 MR. JONES: That's exactly our point. We believe it should be. Europe has  
38 experimented with this and has a several year project. There's actually several circumstances -- six that  
39 we've identified in the United States -- where CO2 is actually purchased and used for -- in so-called CO2  
40 flood operations, which as a practical matter would probably leave the CO2 down there.

41 As the agriculture groups discussed, there are, of course, legitimate permanence and  
42 measurement issues and leakage issues, and they'd have to be addressed honestly and fairly in -- in the --  
43 in the EIA addressing this and including it.

44 But an oil company considering participation in the 1605(b) program is currently faced  
45 with the situation where it feels obligated to report as it should CO2 emissions that come out from  
46 geologic formations. But it's questionable whether they would be credited if they actually reinjected this  
47 stuff.

48 So it's an illogical and inconsistent format. And we hope that'll be corrected in the  
49 future.

MR. BROOKMAN: Thank you. Bill?

MR. TOWNSEND: I'm glad you brought that up. Bill Townsend with Blue Source.

We built a geologic sequestration project in west Texas taking CO2 from the vent stacks of natural gas treatment plants and injecting it into oil reserves and produce about a million tons a year of sequestered CO2. And specifically did not put it on 1605, took it to Canada instead because there was no logic place on the -- on the registry and credit couldn't be given.

It's a -- it's a huge market in west Texas, in Wyoming, in Mississippi, and yet we're taking those credits, really, out of the U.S.

And in a sidebar discussion, I'd be happy to describe the size of that.

MR. BROOKMAN: Yeah. Why don't the two of you connect on that?

Other specific comments related to this last breakout or to the breakouts generally, more -- or more globally? I note that we've captured a few common threads and themes. I'm wondering if there are others that come to mind briefly right now? Particularly areas where you see -- you see a little bit of convergence happening.

Yes? Your name, please, for the record?

MR. HAMME: Roy Hamme, Duke Energy. One of the things I've picked up in at least two of the presentations which I think merit bringing out here were calls that the government should not attempt to determine credibility or value. The markets are there to do that. It came up, I think, in the -- in the industry and other small sources area and also in ag and forests.

The market can assign prices. I think that concept needs to get out here. We don't need government to do that. We don't need government to determine what's creditable. The markets can do that. They're doing it now. They'll get better at it as time progresses.

MR. BROOKMAN: Thank you. Other kind of crosscutting themes you would note? Areas of possible convergence?

Mike, I want to cue up the next slide.

I want to go quickly, before we go to break, I want to get started on the next subject area, which is verifying emissions reductions.

Yes, Paul McArdle?

MR. McARDLE: I'm sorry. I don't want to go back -- spend too much time on this, but I do want to get back to that geological carbon issue.

MR. BROOKMAN: This is the way they are at EIA. They are so specific.

MR. McARDLE: Under the section -- under the section --

MR. BROOKMAN: These are the guys that capture the reporting stuff. Go ahead.

MR. McARDLE: Under the --

MR. BROOKMAN: You're doing a useful thing here.

MR. McARDLE: -- section 10 project type, which are the other emission reduction projects, there is a project type for the underground injection of carbon dioxide. So there is -- there is a place under the --

MR. BROOKMAN: Speak into the mike.

MR. McARDLE: -- in the -- under the section 10, which is the "other" category. But maybe we should be more specific about it --

MR. BROOKMAN: Okay.

MR. McARDLE: -- in the future.

(Slide)

Session III. Verifying Emissions and Reductions

MR. BROOKMAN: These are the issues, the questions, that have been prepared. You see the slide.

To cue up this discussion on verifying emissions and reductions, what should be verified, what process and methods, what data record -- record upon which reports are based, physical

1 measurement of emissions or fuel use, verification methods, on-site inspections, off-site reviews,  
2 frequency of verification, maintenance of records.

3 We've already covered some of this a little bit kind of in passing, but let's -- let's start  
4 with the top block there. What should be verified in those other bullets, and address those first.

5 Who would like to start? A key issue of verification.

6 Rebecca?

7 MS. EATON: I think what's important to be verified, instead of trying to actually verify  
8 installations that might have occurred or have somebody do -- you know, have engineers crawling over  
9 new pieces of equipment, verifying the assumptions and thought process that went into the emissions  
10 tracking system and the methodology. I think that -- that's certain something we've been spending a lot of  
11 time with companies, both that partner with WWF in the Climate Savers Program, but quite honestly, we  
12 also spend a lot of time with companies not in the program. There seems to be a real need for that,  
13 helping companies verify their emissions tracking system, the assumptions, and the thinking that went  
14 into developing it.

15 MR. BROOKMAN: So that's at the level of the processes and tools and all that sort of  
16 business. Okay.

17 Other comments on what's needed? Yes, Kristin?

18 MS. ZIMMERMAN: Kristin, GM. I would support certifying verifiers, number one, to  
19 some common standard but offering -- if it's -- if all of these reports are reading into the multi-tier  
20 approach, that we don't worry about certification and verification -- pardon me -- if we just want the -- the  
21 image credit, you know, that first tier.

22 MR. BROOKMAN: Uh huh.

23 MS. ZIMMERMAN: But if indeed there is any wish to transfer the tonnage, then you go  
24 up through the --

25 MR. BROOKMAN: There's a different level of rigor --

26 MS. ZIMMERMAN: -- the criteria.

27 MR. BROOKMAN: -- as you progress through the tiered system.

28 MS. ZIMMERMAN: For both verifiers and certifiers, yeah.

29 MR. BROOKMAN: And what you heard in my group yesterday, one person saying,  
30 well, it shouldn't necessarily be, in our opinion, that it would need to be a certified third party verifier to  
31 get you that blue chip. It may be possible for you to do it well enough yourself or -- or something like  
32 that. However, one would presume you'd have to meet a certain level of rigor, a very high level of rigor,  
33 to obtain that standing.

34 I just offer the point that was made yesterday. This person's not here today.

35 Do you want to counterpoint that?

36 MS. ZIMMERMAN: Again, the guidelines should be consistent through all the tiers, the  
37 guidelines for reporting, but --

38 MR. BROOKMAN: At each level it should be consistent?

39 MS. ZIMMERMAN: Right.

40 MR. BROOKMAN: Yes.

41 MS. ZIMMERMAN: But -- but the verification piece will add more rigor per tier.

42 MR. BROOKMAN: Right.

43 MS. ZIMMERMAN: And yeah, there is a bit of integrity of the reporting entity from the  
44 get-go.

45 MR. BROOKMAN: Mm-hmm.

46 MS. ZIMMERMAN: But you've got to have a third party come in or there's a conflict.

47 MR. BROOKMAN: Okay.

48 MS. ZIMMERMAN: In valuing the tonnage.

49 MR. BROOKMAN: Go ahead, Mark.

MR. FRIEDRICHS: Not to disagree in any respect with one of our largest members, as GM is, as a general matter, I think manufacturers, I can say with some confidence, do not believe that verification as an independent matter needs to take place when you file. You have a CEO sign -- we think that the CEO should sign the document saying this is true.

MR. BROOKMAN: This is at the point of filing?

MR. FRIEDRICHS: At the point of reporting.

MR. BROOKMAN: Yes. Thank you.

MR. FRIEDRICHS: And at -- the verification can certainly take place when -- if any party wants to sell, any party wants to buy, they work it out. And they can either have a certified verifier or whatever method they want to use at that point.

I am intrigued by Rebecca's comments that a process -- that the procedures used to calculate your emissions might well be something that DOE should include in its guidelines.

MR. BROOKMAN: Uh huh.

MR. FRIEDRICHS: And be required.

MR. BROOKMAN: Uh huh. Rather like test procedures or something like that. Yes? That may be an analog to that.

Kristin, go ahead. Follow on. And then I'll return to you, sir.

MS. ZIMMERMAN: Kristin again. Mark, I agree. That's what I meant to say. If I did not convey it, I apologize.

MR. HAMME: I must say, I see a little --

MR. BROOKMAN: Name, please?

MR. HAMME: Oh, Roy Hamme, Duke Energy. Thanks.

I must say, I see little value in verifying emission reduction reports into the registry. I see little value in a tiered structure to accommodate different levels of that. If you want to trade a credit, you will never avoid the need to do due diligence on that trade. The verification effort won't help there.

MR. BROOKMAN: Uh huh.

MR. HAMME: If you want to verify, I think you need to focus on process and methods.

MR. BROOKMAN: Mm-hmm. Okay. And -- okay. Other -- other comments on this, please? Yes?

MR. SKERNOLIS: Ed Skernolis with Waste Management. I think you need to have a line item for cost. Small may be beautiful but it's expensive when it comes to the process of verification for reduction projects.

And it -- consistent with the last comment, when you make the transition from reporting a reduction to trying to trade -- get credit and trade that reduction, the verification will obviously leap up. And that will -- and that will become part of the price of the commodity you're trying to sell.

If you're not trying to sell anything, it seems to me that cost is going to be very, very important to the EIA in terms of participation. And I think you have to think very hard about that.

If all you're looking for is a record of reductions but you make the verification process so costly, you're going to deter a lot of registrars.

MR. BROOKMAN: Thank you. This -- this point here, data record upon which reports are based, that's a due diligence kind of an issue there. Kristin, going to your comment about due diligence, right?

I mean, it's -- it's -- is this -- does this mean who keeps the records, how expensive the records are, maintenance of records, all that kind of thing?

Mark Friedrichs, I'm looking to you. This -- does this mean, who keeps the records, maintenance of the records, due diligence regarding the records, that bullet point there? Arthur? Go ahead Arthur.

MR. RYPINSKI: Yeah. The -- the distinction here is that when people talk about verification, they are often -- they often have in mind several distinct ideas, all of which fall under the

1 rubric verification.

2 And one distinct set of ideas is -- is what is characterized in the background paper as  
3 process verification.

4 MR. BROOKMAN: Uh huh.

5 MR. RYPINSKI: Essentially, you verify the process by which the -- by which the  
6 estimate is --

7 MR. BROOKMAN: This goes to Rebecca's point -- to Rebecca's point, yeah.

8 MR. RYPINSKI: A second approach would be to examine the -- the underlying data. In  
9 this case it would be -- mostly be fuel purchase or fuel consumption data on which the -- on which the  
10 estimate is based.

11 And then a sort of third, more -- more extensive concept would be to -- would be to look  
12 at -- at meters and physical measurement data from the -- from the field.

13 MR. BROOKMAN: So this in fact is a hierarchy?

14 MR. RYPINSKI: Yes.

15 MR. BROOKMAN: Interesting.

16 MR. RYPINSKI: And the underlying -- the underlying notion is that there are different  
17 kinds of verification. And the question to the group, then, is what is the appropriate level.

18 MR. BROOKMAN: Please.

19 MR. ALARCON: Carlos Alarcon, CO2 Financial. I wanted to cycle back to Ed and the  
20 gentleman from Duke Energy.

21 There are financial entities existing now that will look at bundling or securitizing various  
22 forms of credits into, let's say, one -- one package, one -- one box in -- in various forms. So the business  
23 of small but -- but expensive becomes somewhat abated when you offer these -- when you offer these  
24 packages. They may be 200,000 and add up to, you know, 5 million tons and that sort of thing.

25 So I offer that out there to -- to those who are concerned about small but expensive.

26 MR. BROOKMAN: Okay. Thank you. Lee Ann?

27 MS. KOZAK: Lee Ann Kozak, Southern Company. I guess, first of all, we do not  
28 believe that there should be any verification required beyond the self-certification in the statute.

29 Secondly, we don't think it would be a good idea to do tiering based on the level of  
30 verification that has taken place.

31 However, what we do support in the interest of openness and transparency is a reporting  
32 system where the reporter identifies the type of verification that has taken place. This allows a great deal  
33 of flexibility among reporters. Also, within a company's own report, it allows flexibility to perhaps do  
34 greater verification on some areas or some types of projects and perhaps do lesser on others without  
35 locking them into an -- an all-or-nothing.

36 MR. BROOKMAN: And do you -- and noting that you think there should only be one --  
37 one stripe of verification -- that is, that you're either verified or not verified and it's not silver -- silver-  
38 gold-platinum, whatever. It's none of that.

39 But -- what -- do you have a comment on whether it should be process and methods  
40 verification, whether it should be data record verification, whether it should be physical measurement  
41 verification?

42 MS. KOZAK: I think the reporter should have the option of doing any or all of those.  
43 And in their reports they would indicate what type or level of verification they've done without labeling it  
44 as a silver level or a bronze level or a gold level.

45 And again, they would -- within that, they would have the option of perhaps doing, you  
46 know, self-certification on some, perhaps process methods on others, and very detailed -- detailed  
47 verification on yet another set of the data within a report.

48 MR. BROOKMAN: I'm making a leap here. One would presume if you had someone  
49 who was a qualified verifier, a certified verifier or something, that person might be able to say, it seems

1 as though you need this combination of things to really make this -- you know, to really do this  
2 verification completely adequately.

3 I saw a hand in the back of the room. Please find a microphone.

4 MS. HAWES: Ellen Hawes from The Nature Conservancy. Yeah, just in the context of  
5 forestry projects where, you know, the credits are accruing over a long time period, you of course have to  
6 go in and do some sort of physical verification every few years to see what is actually growing.

7 Now, you know, the way we conceive of it, we are doing this with a partner. Windrock  
8 International is going and measuring this for us.

9 Now, that's what we call verification. I think it's a separate issue. Maybe, then do we  
10 need some sort of certification of the verification we ourselves --

11 MR. BROOKMAN: Okay.

12 MS. HAWES: -- have been doing. I don't -- I don't know what people think about that.

13 MR. BROOKMAN: Other comments on that aspect of verification?

14 So what I've heard so far is that you might use -- in this hierarchy of verification means,  
15 you might use any or all of them and that should be left to the discretion of the company that seeks the  
16 verification. I believe that was your point.

17 Bill?

18 MR. FANG: Bill Fang, Edison Electric Institute. Several comments.

19 Certainly agree with Lee Ann Kozak about self-certification. That's all that's required  
20 under the statute.

21 There might --

22 MR. BROOKMAN: Did you say --

23 MR. FANG: Self-certification.

24 MR. BROOKMAN: Yeah. You left out the "verification" word.

25 MR. FANG: Well, the statute talks in terms of self-certification, but that's, I think, the  
26 general subject we're talking about, is --

27 MR. BROOKMAN: Okay.

28 MR. FANG: I'll get certification in a moment. That -- separate -- this is really a separate  
29 subject. Or the certifiers.

30 MR. BROOKMAN: Thank you.

31 MR. FANG: So we think third party verification, you know, could be optional. There  
32 may -- it may be desirable for some projects, but that's at the election of the reporter.

33 In cases where reporters have elected to have third party verification of projects, it might  
34 be helpful to have some uniform standards for such a verification. However, we don't think the  
35 government should be in the business of certifying verifiers.

36 MR. BROOKMAN: Okay.

37 MR. FANG: We do not want to see DOE certifying verifiers, for example.

38 Now, in the point about transaction costs --this was brought up by the Waste  
39 Management person. In our comments back in June -- on June 5th in our transferable credit paper, this is  
40 what we indicated.

41 Third party validation for CDM projects, including baseline studies, validation of project  
42 methodologies, and verification performance, can result in one-time costs on the order of \$100,000 with  
43 recurring costs of \$10,000 to \$15,000 annually.

44 Those are -- those are significant transaction costs. And one of the -- the ten  
45 recommendations that the four agencies sent to the president were to minimize transaction costs. So that  
46 is a significant policy reason for questioning why there should ever be any kind of required verification.  
47 Those are tremendous verification costs both in the -- for energy and for forestry projects.

48 MR. BROOKMAN: I'm going to write that down as another crosscutting theme. I've  
49 heard that plenty. Minimize verification costs. Okay.

1 Thank you. I saw -- yes, please.

2 MR. SPITZER: Hi. Marty Spitzer with the House Science Committee. Leaving aside  
3 the question of who externally might verify, whether it's government or third party certified verifiers,  
4 whatever, just an observation.

5 If -- if you're looking at credits for these -- these tons and they don't come with some kind  
6 of outside verification, I -- I just give you the caution that I don't think it's going to pass the straight-face  
7 test.

8 MR. BROOKMAN: And presumably, the more credibility, transparency, trackability,  
9 tractability that these data would have, that would also potentially translate in terms of value in any  
10 market.

11 MR. SPITZER: Absolutely. But I mean, there are transaction costs. There are all the  
12 issues in precisely how you do it. But just as a threshold matter, keeping it out of -- you know, let -- self-  
13 certification only, I don't think it's going to pass the straight-face test.

14 MR. BROOKMAN: Okay. Okay. Thank you. Yes, please? Russell?

15 MR. JONES: Russell Jones, American Petroleum Institute. One of the themes of the  
16 work group yesterday, the Industry and Large Emitters I guess it was called, was the notion that there are  
17 people who want to engage in this game, I guess you'd say, so they can understand their emissions, so  
18 they can track their emissions, so they can help meet the president's goal of the 18 percent reduction  
19 nationally.

20 At the same time, they may or may not want to participate in the verification effort.

21 MR. BROOKMAN: Right.

22 MR. JONES: So we -- we support a flexible system. We support the continuation of the  
23 self-certification. We do also support the expansion of the verification information that's in the current  
24 1605(b) report, which is minimal at best. And it could easily be expanded into the areas that you're  
25 talking here.

26 MR. BROOKMAN: The word you're using, "flexibility," is kind of a broad term for  
27 having a system that accommodates many different kinds of reporters that are in different places on this  
28 progression from more simple to more complex and complete.

29 MR. JONES: That's correct.

30 MR. BROOKMAN: Yes. Okay.

31 Other comments? Please?

32 MR. SKERNOLIS: Ed Skernolis with Waste Management. I mean, I -- one of the things  
33 that bothers me about this discussion is -- even my comments have defended a flexible process as well.  
34 On the other hand, it seems to me EIA has to go through some screening process. And it seems to me  
35 they're entitled to let the public know whether or not the data that's submitted has or has not been verified  
36 or -- or whether or not there's information available on process and methods --

37 MR. BROOKMAN: Or whether it's even self-certified, for that matter.

38 MR. SKERNOLIS: I mean, there has to be, it seems to me, for the entire database to  
39 have some credibility, there has to be a screening process. EIA employs right now -- I know when we  
40 submitted our initial thing, we had to -- we went through a couple iterations. We sat down and we talked  
41 through issues and methodologies and things like that.

42 So we know they're doing that now. It seems to me that that's going to continue in some  
43 measure and that's unavoidable. But whether or not a person has to go through a specific verification  
44 process in order to report is a separate question from whether or not EIA should identify whether certain  
45 verification methods have been followed.

46 MR. BROOKMAN: Gotcha. And I -- embedded in your comment, I believe, is this  
47 notion going back to the issue of it being credible at some level and there being a -- some -- some  
48 standard stated, some basis in the -- in the 1605(b) registry program that enables an assessment regarding  
49 credibility.



1 Okay. Other comments on this subject?

2 Just so you know, we're going to take a break in about five minutes.

3 You're next.

4 MR. HAMME: Roy Hamme, Duke Energy. When it comes to taking a look at whether  
5 or not verification ought to be necessary for a credible report, I'll point out that 1605(b) is a voluntary  
6 guideline.

7 MR. BROOKMAN: Right.

8 MR. HAMME: It's not a mandatory rule. If you take a look at reporting under  
9 mandatory rules like the Clean Air Act, there's nothing beyond the entities certifying that this report is  
10 correct.

11 Is it appropriate to go beyond that in a voluntary program.

12 MR. BROOKMAN: And what is your sense of that?

13 MR. HAMME: I would say "no."

14 MR. BROOKMAN: Thank you.

15 Other comments, please? I see Paul.

16 MR. CICIO: Paul Cicio, Industrial Energy Consumers of America. This -- it's a  
17 voluntary program and it's nice to have a easy system where we self-certify. But we have a tremendous  
18 conflict here. And the conflict is that the administration's -- the president's program calls for the ability  
19 to transfer these -- awarding of transferable credits.

20 That makes it sound like it's -- that it's placing the government in the position of saying,  
21 the government has deemed these submissions of reductions to be transferable. It adds certain qualities  
22 of legality and quality. And when you've got companies self-certifying and they haven't -- there's no  
23 validity there or verifying or certifying, there's no quality behind that. That raises many, many serious  
24 questions. And I see that huge chasm there.

25 If it's going to be a voluntary program with new and improved quality guidelines for  
26 purposes of recognition of doing wonderful things, showing innovative progress and taking action to  
27 address climate change, then self-certification is great.

28 But you see where there's a huge disparity of the two. Transferable credits, potentially  
29 the government sanctioning, saying that they are quality. Buyers out there thinking that these have  
30 certain special qualities that the government has sanctioned but they really aren't.

31 I'll leave it with you.

32 MR. BROOKMAN: Thank you. That notes the complexity of this task.

33 Janet?

34 MS. RANGANATHAN: Janet Ranganathan, the World Resource Institute. The cost of  
35 verification is not trivial. And it's a mixed bag out there in terms of the quality of verifiers, because there  
36 are no standards.

37 MR. BROOKMAN: Because there are no standards.

38 MS. RANGANATHAN: There are no -- there are no generally accepted standards for --  
39 for verifiers of greenhouse gas emissions.

40 There is this issue on the table, is we don't know what's going to be creditable at the end  
41 of the day. We're trying to design, you know, a rigorous and transparent accounting reporting system of  
42 which some subset in the future we hope will be creditable.

43 So one possibility here is that the -- the people who are reporting design their inventory  
44 and their emissions reports in ways that could be verified subsequently and that they be recorded. And at  
45 some point when the crediting system is worked out, at that point then they'll verify it because there is  
46 some value to it then.

47 MR. BROOKMAN: Thank you. Thank you.

48 Other comments on verification? Please.

49 MR. SPITZER: I'm Marty Spitzer again with House Science. I just wanted to comment

1 in response to the remark about voluntary versus mandatory rules.

2 I've worked with a lot of voluntary programs. It seems perfectly appropriate to have  
3 mandatory requirements within a voluntary program. It's not the same thing as saying that because it's  
4 voluntary, therefore all the elements of the program somehow can be voluntary as well.

5 MR. BROOKMAN: I think we touched upon that yesterday, that even in a voluntary  
6 program one would expect that there would be a certain level of rigor surrounding what you include in  
7 your report to be in fact a part of this voluntary program.

8 Did you wish to follow on with this?

9 (Pause)

10 MR. BROOKMAN: They really taped these things down really well. Thank you.

11 MR. PALMISANO: Thank you. I'm John Palmisano and I'm -- on these comments I'm  
12 just speaking for myself.

13 Within the context of 1605(b) as it currently exists, I think there's a serious question as to  
14 what's the underlying statutory authority to develop credit-giving protocols or certifying professionals,  
15 either way.

16 There is a big experience within U.S. EPA when Environmental Auditing, FDA,  
17 Department of Agriculture, et cetera, on developing certification procedures and developing certified  
18 professionals. Each one of those, and I'm familiar with some of these programs, took years -- three, four,  
19 five years to develop certifications for professionals or just certification procedures.

20 So question one, what's the underlying authority that may exist, and question two, if all  
21 this is to be achieved within the next year, which is, I think, the schedule you put up yesterday, it seems  
22 impossible to achieve certification activities within 12 months.

23 MR. BROOKMAN: Okay. Thank you. Thank you.

24 Yes? Bill Fang?

25 MR. FANG: Bill Fang, Edison Electric Institute. I wanted to respond to your comment  
26 or Marty Spitzer's comment about the need for rigor.

27 One of the crosscutting issues that DOE highlighted which hasn't really gotten much  
28 discussion is the balance between rigor and practicality. And we certainly want to weigh in on the side  
29 of practicality. That's -- that's not gotten much emphasis in this discussion.

30 The example I'll use -- and I'm sorry to disagree with Mark Whinton but he is a member  
31 of NAM so I'm -- I can actually do that -- is his comment calling for the CEO to sign off on these reports.

32 That, to us, -- that's not practical. These are large reports. There's a lot of detail in them. I don't think  
33 that CEOs can be held to -- to know -- you know, to be -- to self -- to certify the accuracy of all the  
34 information in the reports. That's just not a reasonable or practical requirement.

35 MR. BROOKMAN: Okay. Thank you.

36 Other comments on verification? Yes, please? Gene?

37 MR. STEADMAN: Gene Steadman with Celanese. And listening to the discussion, I'm  
38 always trying to, pardon the pun, dummy it down to common sense. And it seems to me that Rebecca  
39 had a -- had a good point, that if somebody would just come out with a standard process the way you do  
40 it without getting into all this verification and whether the inputs or the numbers were calculated right --  
41 It reminds me a lot of the IRS. Gee, the rules are there but I don't think people are out checking to see  
42 whether or not you really made this or that -- except on a random basis.

43 So something like that, to me, seems to add credibility to the process. If you had a  
44 common process --

45 MR. BROOKMAN: Right. Process and method kind of --

46 MR. STEADMAN: -- and leave it at that. And then let the individual entities or  
47 companies reporting -- leave it to them as to whether or not the things are verified as proper or improper  
48 in accordance with that process in the private marketplace.

49 MR. BROOKMAN: Are there individual comments on on-site versus off-site

1 verification? I mean, based on what several people have said, I presume that both of these could -- could  
2 happen and potentially coexist. Additional points? Rebecca?

3 MS. EATON: I actually don't have an additional point. I just snuck this in.

4 I wanted to comment -- when Bill Fang was saying that it's not practical for CEOs to sign  
5 the papers. And I just -- we had a chuckle over here because somebody's got to sign the paper when  
6 you're sending information to the federal government. Why not the CEO?

7 MR. BROOKMAN: Thank you. Additional points on on-site and off-site?

8 (No response)

9 MR. BROOKMAN: How about frequency of verification and maintenance of records? I  
10 mean, presumably there needs to be some sort of standard about maintenance of records, right? Does --  
11 how does it happen -- does -- additional comments on those points? DOE -- DOE is seeking your  
12 guidance on this.

13 Bill?

14 MR. FANG: Bill Fang, Edison Electric Institute. On the on-site inspections versus off-  
15 site reviews, we're certainly in favor of off-site reviews. This is not a regulatory program. It's a  
16 voluntary program, and it would be too much to -- to take -- you know, on-site inspections are just too  
17 intrusive.

18 MR. BROOKMAN: Okay.

19 MR. FANG: Off-site reviews are sufficient.

20 MR. BROOKMAN: What about maintenance of records? Do you have a perspective on  
21 that?

22 MR. FANG: I'm sorry. What is the issue again?

23 MR. BROOKMAN: Maintenance of records. I guess, the -- how long you keep the  
24 records, how available they would be to other people to review, those kinds of issues. I'll come back to  
25 you, Bill.

26 Other -- other comments on that? I mean, for example, the IRS has -- here's the standard  
27 for recordkeeping. And if you're a corporation, then -- like I am, then, you know, financial records on  
28 forever, essentially, right? And so -- this is a voluntary program. Please?

29 MR. SKERNOLIS: Ed Skernolis with Waste Management. On the maintenance of  
30 records, as a company which has both submitted to 1605(b) and conducted transactions in the  
31 marketplace, we wish we had maintained records back to 1990 on some of our projects in certain cases.

32 But I really think, again, although we might not have a formal tiering system, we have --  
33 I think there's an understanding in this group in general that there's going to be a difference between  
34 registering credits and selling credits in the marketplace. And maintenance of records, once you're in the  
35 marketplace, is going to be a lot more significant issue to you.

36 It seems to me that DOE has to take that into account. Again, for somebody who's just  
37 wanting to go on record as having undertaken an emission reduction project, I think you can be modest in  
38 your maintenance requirements if -- if that's what they're heading for. And anybody who wants to then  
39 take those credits from the marketplace would be well advised to maintain records.

40 MR. BROOKMAN: This is analogous to Marty's comment, yes. It's fitted. Yes. Okay.

41 Final comments on verifying emissions and reductions? Yes? Yes, please? Arthur?

42 MR. RYPINSKI: I think the discussion of maintenance of records is laboring under a --  
43 under a slight misapprehension as to what was -- what was conceived. It was -- the underlying notion  
44 would be that a -- that a -- a verification strategy would be to require the reporter to maintain records  
45 sufficient to provide verification to the -- to the desired standard but those records would not necessarily  
46 be examined except on a challenge or random basis.

47 MR. BROOKMAN: Thank you. Follow on based on that comment from Arthur? Final  
48 comments on -- yes? Go ahead, Marty.

49 MR. SPITZER: Having been involved in a number of voluntary programs and helping to

1 start them, I would agree with Bill about the importance of practicality. And I wanted to suggest that in  
2 this -- in this regard, in the verification, whatever happens at the outset of the program, there's going to be  
3 a lot of learning going on, both on the government side, on the businesses side. And there tends to be a  
4 need for, especially in a voluntary program, partnerships where people actually can build some trust so  
5 that whoever is involved from the government side can work closely with the business community as  
6 they're developing these reports, especially in the early times where both sides need to learn what works.

7 So maybe in the -- maybe in the beginning there's more collaboration. It's not oversight  
8 in a sense of policing as much as we're learning how to do this better. And eventually, it settles into  
9 something that might be more akin to the way we do a lot of other things, which is with random audits or  
10 random verification. Something that allows credibility to be established in the marketplace.

11 MR. BROOKMAN: Thank you. Janet?

12 MS. RANGANATHAN: Just to -- to add that we've been doing this for nine years, so  
13 we need to see -- show some signs of improvement.

14 Yes, of course we're going to continue to experiment and learn, but we should be  
15 galvanizing and cementing in what we've learned already on how to do this.

16 MR. BROOKMAN: Thank you. Thank you. Final comments on this subject? Yes,  
17 David?

18 MR. FINNEGAN: Dave Finnegan, Mayer, Brown, Rowe, and Maw. I just -- I guess I  
19 wanted to comment about -- this sort of -- across this subject of discussion is that EIA's got a large role or  
20 should have a large role in assessing or verifying or whatever you want to call it through the records or  
21 the reviews or whatever.

22 The statute, of course, says that EIA is to establish a database comprised of the  
23 information voluntarily reported and that the information may be used by the entity, the reporting entity,  
24 to demonstrate achieved reductions of greenhouse gases, which is somewhat a basis also for the crediting  
25 program. But also, it doesn't necessarily -- tell EIA except if they want to use their underlying basic  
26 authority that they're in a big assessment or review or whatever you want to -- verification of this.

27 And I -- as I recall the letter to the president, was that we want to minimize costs to the --  
28 to the government as well as minimize costs to the -- to the reporters. But -- that's why -- and I think  
29 that's why the self-certification is in here. It allows the reporters to self-certify and to demonstrate what  
30 they've achieved.

31 MR. BROOKMAN: Thank you. Thank you. Final comments on verifying emissions  
32 and reductions? Paul Cicio?

33 MR. CICIO: I'm going to go back to the subject I brought up earlier but with a different -  
34 - slightly different twist. And truly, self-certification is wonderful if this is a -- if it's -- it's a voluntary  
35 program, and there's merits to self-certification.

36 But if -- but the definition of what the -- what the government is going to do in terms of  
37 transferable credits makes a world of difference. We're -- we're -- transferable credits is deeming some  
38 form of quality. And if you're -- if we're moving into a carbon world where it's measuring in tons and  
39 tons reductions, companies are going to be -- well, they already are putting these ton reductions as an  
40 asset on their balance sheet. All of a sudden, this takes on financial responsibilities, financial integrities,  
41 financial implications. And when you get into trading, well, you all know the kind of debacle we've had  
42 over the last couple years with all types of trading issues. And that's what -- that's where this is headed.

43 So it's a very serious, very legal issue. And so, again, I'm just raising this serious  
44 question about the voluntary program and things like low cost and self-certification versus the aspect of  
45 what a DOE transferable credit may mean and its implications.

46 MR. BROOKMAN: Right. Thanks for raising it.  
47 Yes?

48 MR. SKERNOLIS: Ed Skernolis with Waste Management. Maybe just to throw a  
49 grenade into the center of this discussion. The Department of Energy and EIA has a separate obligation

from the 1605(b) mandate which is data quality management standards that have been established by OMB and which they must follow and to use quality data for any governmental policy or rule-making. And it seems to me they're going to have to tell us at some point what the standards of quality are going to be for 1605(b) to be useful as a governmental policy tool -- tool because if it doesn't meet those data quality standards established by OMB, it seems to me that they're not going to be allowed to use it --

MR. BROOKMAN: Thank you.

MR. SKERNOLIS: -- very effectively.

MR. BROOKMAN: Thank you. And of course, the Department seeks your advice on what should be included in that.

Yes?

MR. PALMISANO: John Palmisano. The U.S. EPA developed, I think about eight years ago, a program called the Open Market Trading System, which was predicated on self-certification. It's functioning in both -- New Jersey, Connecticut, and I believe the state of Michigan.

MR. BROOKMAN: Thank you. Final comments on verifying emissions and reductions?

(No response)

MR. BROOKMAN: I'm going to suggest we take a break. It's 10:45. We'll start back up at 11.

The way we're on track right now, folks, I think it's very likely we will not be going to 4:00 this afternoon. So I just offer that for your planning purposes.

Thanks for a good start this morning. When we come back, we'll be talking about managing the 1605(b) registry.

(Brief recess)

MR. BROOKMAN: Come on, folks. Let's start. Join me.

(Pause)

MR. BROOKMAN: Okay. We're going to begin here shortly, I hope.

(Pause)

MR. BROOKMAN: One housekeeping item. For those of you that are parking in the hotel, we have a voucher. And if you haven't gotten one already from the registration desk from Adrienne, please do so. Save yourself a few dollars.

Any other housekeeping items? No.

AUDIENCE MEMBER: These speakers are --

MR. BROOKMAN: They're not working.

AUDIENCE MEMBER: -- just so hard to manage. If we could have one of the remote mikes at each table, that would be great.

MR. BROOKMAN: Thanks for saying that. And these in fact came at considerable expense.

AUDIENCE MEMBER: Really?

MR. BROOKMAN: Yeah. I mean, so I don't know whether that option was even more expensive. It was.

I think they're okay if they're stationary. Matter of fact, maybe we should just have it on a cord that goes around since the cord is there anyways.

Okay. Okay. That's good. That's very helpful.

Please take your seats. Anybody that's outside that door, would you rope them in here?

(Pause)

MR. BROOKMAN: One other item. Many of you have requested the participants list. That item will be available as you leave for lunch, and perhaps that'll be at the end of the day today. And we're making copies of it right now as we speak.

1 Okay. We're still waiting for a few more people to join us.

2 (Pause)

3 MR. BROOKMAN: We have one more section in the agenda to cover. But before we  
4 do, let me -- let me introduce Under Secretary Robert Card.

5 We've been -- many of you may not be aware. Robert Card is a very busy man. You're  
6 aware of that, I'm certain. But you may not be aware that he's been here for the bulk of the last two days  
7 listening. So that's an -- quite a commitment of an under-secretary's time.

8 So I personally thank you for that. That does nothing but help us.

9 And Robert Card has some remarks.

10 UNDER SECRETARY CARD: Sure. Just -- just real briefly, I just wanted to thank all  
11 of you for your -- for your disciplined but enthusiastic participation. This has been one of the smoothest  
12 meetings that I've seen on an issue that has this many possibilities and points of contention.

13 So either you're extraordinary or you just don't think anything's going to happen so it's  
14 not that important. But I can assure you the -- the latter is not one of the options.

15 But on -- on behalf of the administration and the Department of Energy, again, I wanted  
16 to thank you for your participation. Also, welcome any other types of participation you'd like to do  
17 outside of these four.

18 And I -- I can just tell you that I've been following this pretty intensely over the last many  
19 months, and I still -- I still learn quite a bit here. Just to have sort of the cognoscenti of the climate  
20 change community here exchanging ideas was very helpful for me and the other administration  
21 participants.

22 So again, thank you. And I'll -- I'll send you off to an early start.

23 I -- I would like to stay for the rest of the day, but one of my assistant secretaries is  
24 getting an award across town at lunch so I'm going to head over there and congratulate her.

25 So again, thank you, and it's been great sharing this time with you.

26 MR. BROOKMAN: Thank you.

27 Okay. One thing that -- one bit of information that came forward at the break was the --  
28 on the subject of verification, was that, as I understand it -- Paul McArdle, I'm looking for you for  
29 verification. DOE in fact does not do verification presently under the 1605(b) program. However, your  
30 certification does involve checks and balances. Is that correct?

31 MR. McARDLE: Yes. Paul McArdle from EIA. And actually, I brought this up to  
32 Doug because, actually, one of our reporters came up to me during the break and said that, you know,  
33 that we do do a fairly rigorous review of the data that is actually submitted to us. It is self-certified but  
34 there are several steps we go through. And we just don't take the data and put a big rubber stamp on it  
35 and throw it in the database and say we're done.

36 It's -- it's quite a labor-intensive process, actually. And we'll outline the four steps for  
37 you that we do.

38 Number one, when we get the report in, we do what's called an analyst review. That's  
39 where the report is checked for internal consistency, accuracy of calculation, and comparability with  
40 other sources.

41 After we go through that process, built into the reporting software, and about three-  
42 quarters of our reports, maybe 70 -- maybe up to 80 percent report electronically. So they send us a file  
43 using the reporting software. And built into the software is an edit subsystem to check for  
44 inconsistencies in the numbers that are entered.

45 And the analyst will go through those edit checks to see which ones are valid, which  
46 ones may not be as -- as the next step in the review to find out any inconsistencies in the report.

47 So that -- that's what we call the methodological edit check, where the -- after running the  
48 edit subsystem, the analyst goes through and checks the -- the edit subsystem, would turn to that system.

49 And lastly, if we find inconsistencies in that process, we're going to call the reporter back

1 and have a follow-up discussion to determine how to settle those differences or errors or miscalculations  
2 in the form.

3 And only after we go through all of that process and we're in agreement is the -- is the  
4 report -- report formally accepted into the database.

5 MR. BROOKMAN: Thank you. And let me have the sheet that you referred to.

6 This -- you have essentially a slide, a Power Point kind of a slide, that lists those four  
7 major points. And we'll insert this in the record or some form of it so that these points get arrayed for the  
8 record, okay?

9 Let's go to the next slide.

10 (Slide)

11 MR. BROOKMAN: There are a few issues left related to independent verifiers. Some  
12 of these we've covered already.

13 We -- I -- we've heard already in the discussion here this morning several people saying -  
14 - questioning whether DOE should certify independent verifiers, whether they should be in the business  
15 of doing that, and also questioning the time frame it would take and the complexity of the task of  
16 certifying verifiers.

17 And I -- I don't think we dwelt too much on the question of who should qualify. Would  
18 some of you like to weigh in on that subject? Who should qualify as independent verifiers, for the  
19 record?

20 (No response)

21 MR. BROOKMAN: Is there a -- please. Go ahead. Yes.

22 MR. ALARCON: Carlos Alarcon, CO2 Financial. Are there a set of standards, are there  
23 -- is there a certain level of certifiability as far as professional --

24 MR. BROOKMAN: Right. Do such things exist presently? James, I'm looking at you.  
25 Use the microphone, please.

26 During the break someone also raised the issue of these microphones. Thanks for your  
27 patience with these microphones. They've been really a juggling act the whole time.

28 James?

29 MR. ALTO: The only ones that I know of, the Association of Energy Engineers has a  
30 certified energy manager. And they also have another classification for verify -- to credit verifiers. I  
31 don't have all their -- but you could probably find that on AEE -- AEECenter dot com.

32 MR. BROOKMAN: And so they certify those folk -- people as verifiers now?

33 MR. ALTO: They're working on that right now, I believe, but I know they have a  
34 certified energy manager. And they're -- recertified every three years -- potentials to go through and --

35 MR. BROOKMAN: And then, presumably, they have a series of criteria and standards,  
36 like things that you must meet to meet that qualification standard?

37 MR. ALTO: Correct.

38 MR. BROOKMAN: Okay. Yes, please. And I'll work back this way.

39 MR. HOLDSWORTH: Eric Holdsworth, Edison Electric Institute. I believe ISO also  
40 has similar standards for verifiers that are a part of the ISO 14,000 process.

41 MR. BROOKMAN: Thanks a lot. Bill and then Miriam and then Lee Ann.

42 AUDIENCE MEMBER: We were looking -- when we verify projects, we were looking  
43 in the categories of the technical competency of the verifier, the financial competency. We laid it out  
44 into two categories: engineering companies, engineering consulting firms, and financial. And ended up  
45 with three companies: URS, Price Waterhouse, and Bechtel.

46 So now we use an engineering company when the project has more of a technical piece  
47 to it and we use a financial verifier when we think the other pieces apply.

48 MR. BROOKMAN: Thank you. That's very practical, useful information. Thanks a lot.  
49 Miriam?

MS. LEV-ON: Miriam Lev-On, and I'm speaking here in my capacity as an independent expert.

Two -- two systems. One is the ISO that was mentioned, and there is a registry accreditation board that is operating in all the countries that have representation to ISO. And that registry accreditation board has a formal training procedure and formal requirement for certifying auditors for ISO 14,000, and one which is the management standard.

And more recently, California, through their Climate Action Registry Program, has adopted a system of certain -- where the California Energy Commission has actually -- has specific guidance and has a process in place for certifying verifiers.

I just want to put in the caveat that that system that the California Energy Commission has put in place is mandated by the legislation that created the California Clean -- the Climate Change Action Registry in California.

MR. BROOKMAN: Thank you. Thank you. Lee Ann?

By the way, several people approached me at the break about warming up this room. I think it's getting warmer already, is it not? I think they -- they're attending to it. It feels warmer in here.

Lee Ann?

MS. KOZAK: Lee Ann Kozak, Southern Company. I'd suggest in terms of who should qualify that the answer will be different depending on what industry you're dealing with. There certainly are, you know, the greenhouse gas accounting expertise and understanding of those issues that would be important.

But a second characteristic is knowledge of the particular business or industry that you're doing the verification on. And again, there is -- I sincerely doubt that there is one person that would be expert and be able to handle all industries. So again, who would -- should qualify will vary.

MR. BROOKMAN: Thank you. I saw one or two more hands, I thought. Maybe not. Yes, David?

MR. FINNEGAN: Just -- Dave Finnegan with the Mayer Brown Rowe and Maw. I just wanted to mention, as to the second question and the question of who should certify, I guess I would argue that if the -- under the statute where it provides that the persons reporting shall certify the accuracy of the information reported, that that doesn't really -- that suggests, anyway, that DOE doesn't have a role in -- in certifying itself. I mean, in certifying independent verifiers.

MR. BROOKMAN: Thank you. Thank you. Final comments on independent verifiers before we go to confidentiality issues? Did you have a comment? Janet?

MS. RANGANATHAN: It's somewhat related, and I wasn't sure where -- when to insert this, but I'll insert it here, if you don't mind.

It's just the issue of making the -- task of verification easier and more credible. And it relates to -- well, I think there's two things to make a verification successful. One is, there's a clear accounting and reporting standard to verify against. And secondly, that there's a set of accounting principles that underpin the accounting and reporting process.

The THD protocol provides for five principles which are actually adapted from financial accounting. They -- they relate to things like completeness, consistency, transparency, and accuracy. They're very useful because it is very difficult to write a prescriptive set of guidelines that's going to address every single issue.

So if you have the account principles to fall back, they can guide the decision-maker in making those. And they can be used by the verifier to verify wherever the inventory or the project accounting has been done in compliance with those --

MR. BROOKMAN: Thank you.

MS. RANGANATHAN: -- principles.

MR. BROOKMAN: Thanks very much. Final comments on this, please? Yes? Your name?



1 MR. STREITER: Yeah, Bob Streiter with the Aluminum Association. Just an ancillary  
2 issue, that I don't think verifiers could really handle -- it came up at the break -- is in terms of emission  
3 factors and what would be done in terms of using emission factors, who certifies factors.

4 I know some of the fuel factors are pretty old and perhaps need to be updated. What  
5 process would be used to -- especially in a multi-quality tiered program for credits. What factors -- how  
6 would you go through those tiers with improved factors for emissions.

7 In the case of aluminum, we had a cooperative research program with EPA in developing  
8 PSC emission factors that's still ongoing. It dramatically improved those factors. And it doesn't -- I'm  
9 not clear. I guess I don't know how emission factors will be addressed and how the quality of emission  
10 factors will be handled in this multi-tiered process and who -- maybe EIA can help. I'm not sure.

11 MR. BROOKMAN: Does anyone want to respond to that? Paul McArdle?

12 MR. McARDLE: Yes. Paul McArdle, EIA. Yes, we'd be happy to work on any -- if  
13 people have suggestions on emission factors that we should be using, we're happy to accept -- well, not  
14 accept them but look at them to evaluate them. We certainly have a set of emission factors that we use  
15 now that are in the guideline. Actually, they're in the reporting instructions that people are -- are  
16 recommended to follow, although people do have the option of using other emission factors should they  
17 be able to justify those alternative emission factors.

18 MR. BROOKMAN: Okay? Okay. Yes, please. Your name?

19 MR. DAVLIN: Todd Davlin, Granger Energy. Just wonder if there's any effort for  
20 consistency between different departments within the federal government on emission factors.

21 And then, regarding verifiability, we rely on professional engineers to basically design  
22 all our air quality systems. It seems like they should be, you know, qualified as verifiable -- as verifiers.  
23 You know, frankly, getting to the CEO issues and other things like that in terms of who's the final  
24 verifier, I think I'm a lot more comfortable with a professional engineer than a CEO after the last few  
25 months.

26 (Laughter)

27 MR. BROOKMAN: First, the question of consistency among the emissions factors. Is  
28 the federal -- does -- can anybody answer that question? Is there an effort to make the emissions factors  
29 consistent across -- that was your question, right? Across the federal government?

30 I've seen a bunch of different emission factors. I didn't see -- check to see whether they  
31 were consistent or not. I saw all kinds of lists.

32 Paul McArdle.

33 MR. McARDLE: Paul McArdle, EIA. I think, you know, from that perspective, both  
34 EIA and EPA are -- are fairly close on the emission factors that are employed, certainly on the fossil  
35 energy combustion. There are some -- there are some more -- some minor differences on methane and  
36 N2O here and there, but by and large, we're basically on the same page.

37 MR. BROOKMAN: Okay. Thank you. And to the -- thank you for your comment also,  
38 as well, on the -- who should -- whose signature should be affixed.

39 Someone else over here?

40 MR. HARVEY: I was just going to agree with Paul.

41 MR. BROOKMAN: Oh, thank you. Reid Harvey from EPA agrees with Paul on the --  
42 (Laughter)

43 MR. BROOKMAN: -- on the -- on the relative consistency of these emissions factors.

44 MR. HARVEY: Right. We have -- we've had a cooperative effort in -- on our  
45 inventories. We've done a comparison, for example, on landfill methane. We used slightly different  
46 models. But they're -- they're pretty consistent.

47 We worked cooperatively on the synthetic gases, the HFCs and PFCs and SF6. So I don't  
48 think that there's a lot of inconsistency that I'm aware of.

49 MR. BROOKMAN: Thank you. Okay. I'd like to move on to confidentiality issues.

1 We've covered this actually quite a bit, I think.

2 Anything additional to be said on confidentiality issues? I'm looking over to Mark  
3 Friedrichs and Arthur and Margot to see if there's any other questions you have related to confidentiality  
4 you'd like to put on the table at this time.

5 MR. FRIEDRICHs: These are confidentiality issues in the context of verification --

6 MR. BROOKMAN: Right.

7 MR. FRIEDRICHs: -- of course. And the question is, should the government have  
8 access to the -- the records that reports are based upon in order to audit those, to -- to verify their  
9 accuracy. Or should other non-government organizations have access to those records if they desire.

10 MR. BROOKMAN: Thank you. Who'd like to start with that one? Arthur Rypinski.

11 MR. RYPINSKI: Yeah. We have several other important questions related to  
12 confidentiality, but I regret that I'm not at liberty to disclose them to you.

13 (Laughter)

14 MR. BROOKMAN: So Mark Friedrichs raises the question about whether the  
15 government should have access to these records, whether third parties should have access to these  
16 records, or whether there's other alternatives that you would like to offer for the -- for DOE's  
17 consideration.

18 Yes, Kristin?

19 MS. ZIMMERMAN: Kristin, GM. What do you mean by "these records," "access to  
20 these records"? We don't -- I'll speak for myself here, but we don't want any reach through to any  
21 specific facility level or source level. I think there's more comfort in reporting an aggregated total,  
22 especially if it's intensity versus absolute.

23 Confidentiality comes in off-line with the buyer and the seller and the trade, which  
24 should have nothing to do with government intervention, I believe.

25 MR. BROOKMAN: That was a good summary comment. That was helpful.

26 Other comments? Additional perspectives?

27 MR. ALARCON: Carlos Alarcon. Kristin crystallizes it, actually, in that what is -- what  
28 is the purpose. Where does the information lead to. Is it transferability. Is it for image. Is it for registry.  
29 And I think there will be as many levels of -- many degrees or types of information that you'll report, as  
30 many levels of rigor.

31 MR. BROOKMAN: And I take it from your comment that however many levels that the  
32 Department of Energy then creates in a registry that make it convenient for those -- or beneficial for those  
33 individuals with multiple needs to participate, the more they might find their way toward participation.

34 MR. ALARCON: In the registry and the performance issues. However, I think we're  
35 discovering as we go along for -- as we go along here that the transfer or the transfer of value is going to  
36 be -- while it's -- while it's part of the end game, the transfer of value is going to be exclusive of 1605(b).

37 MR. BROOKMAN: Okay. Yes, please, Rebecca?

38 MS. EATON: I just wanted to make a comment that was made a little bit earlier about  
39 what -- some of the companies might be more comfortable reporting, certainly not facility level, ideally  
40 aggregated information, and that level -- ideally indexed information.

41 I would say that the last 10 years of reporting in 1605(b) has shown that the system is  
42 really lacking credibility. That's why we're all here today.

43 One of the key investments this group can make in enhancing the credibility is by  
44 enhancing the transparency of the system. And I think that ideally, from my perspective, facility level  
45 information in terms of absolute tonnage would be the best investment in transparency, and certainly  
46 aggregated information in terms of absolute tonnage.

47 However, if companies or if participants are thinking in terms of aggregated information  
48 that's going to be indexed, there's no transparency. It's relatively meaningless information to the  
49 consumer of that information.

MR. BROOKMAN: Thank you. Other comments? Yes, please?

MR. HAVEN: Jim Haven. I'm a third party reporter. I've got 39 different facilities that I do the reporting of 1605(b). And I collect the data, the utility bills, their production by month. I've got everything that's needed to submit the reports for each of these companies.

But I submit it on a production factor, one is the base year, and whether it goes up and down, but that's what they need for 1605(b). So far they haven't needed it, whether they're using board -- lumber or pounds of cloth or whatever it is, or widgets, they need the factor. And the companies that are providing that to me to report, boy, they say, thanks a lot for keeping this stuff confidential.

Over this last month, about six of them going over the reports, they says, gee, thanks for not going any further with that information. If they call down and ask for something, you make a decision whether you should tell them what the numbers or come back to us and we will provide whatever data they want that's in the numbers that I submitted.

So third party reporting is a good buffer on these confidentiality issues.

MR. BROOKMAN: Thanks very much. Other comments, perhaps final comments, on this issue? Have we covered it adequately? One more. Miriam?

MS. LEV-ON: Just a very quick comment that even in -- under the regulatory programs under the EPA, the open reporting relies to the final emissions numbers and not -- it is not necessary to disclose openly the underlying methods that you used for coming up with these estimations. Like -- especially if it relates to what we discussed yesterday, competitive data about throughput.

EPA and the regulatory program can have access to them but those is not open information. So that's very important to make the distinction between the -- the emissions value or the intensity values versus the underlying confidential business information.

MR. BROOKMAN: Thank you. Thank you. Yes, Mary?

MS. QUILLIAN: One last quick comment to remind us all that this -- this confidentiality issue is -- is -- may well decide whether a company decides to file a report with 1605(b). And we need to keep in mind what the purpose of the report is or what the purpose of the program is.

MR. BROOKMAN: Thank you.

MS. QUILLIAN: You know, if it's just to gather information, then we need to -- we need to create an environment in which a lot of different companies are willing to report.

MR. BROOKMAN: Thank you. That last comment from Mary Quillian.

Final comments on confidentiality before we move on to the next slide, please?

MS. WILSON: Cindy Wilson, Catalytics. I'd like to try to think about this a little more simply. We have something called the SEC. We have ownership structures in this country. If you own your own company and you're a one-man operation, you're unlikely to get audited. If you're -- you know, if you're privately held and multiple people, you might choose to be audited. And if you want to register with the SEC, you register information that is audited but you don't register every book you have behind that to operate your corporation. That is summary information and the reach-back is limited in many contexts and is certainly not open to the public.

And while, yes, it hasn't been perfect this year, that system has been a system we've operated on for a long time. And I think it also applies to this type of information.

MR. BROOKMAN: Thank you. Okay. Let's move on to the next slide, Mike.

(Slide)

#### Session IV. Managing the 1605(b) Registry

MR. BROOKMAN: So managing the registry of emission inventories and reductions. This is the last substantive area that we need to cover today.

You can see the -- the sub-parts of this slide about certifying real reductions. How might this get done. A government review process, documentation of reductions, DOE database of certified reductions, and what about the issue of documenting transfers.

Who would like to weigh in on this first? There's quite a bit of discussion about what's

1 real, what isn't, so far, I think.

2 (Pause)

3 MR. BROOKMAN: Managing the registry of emission inventories and reductions.

4 Yes?

5 MR. WHITENTON: I'll take a stab. Clearly, DOE would have a database of certified  
6 reductions because they are self-certified when they're reported. Clearly, the government can --

7 MR. BROOKMAN: You've got to -- Mark, you've got to start again and get close.

8 MR. WHITENTON: Mark Whitenton with NAM.

9 MR. BROOKMAN: Okay. Thank you.

10 MR. WHITENTON: And DOE would have a database of certified reductions because  
11 they would all be self-certified when they are reported.

12 To go beyond that at this point we don't think is necessary. If the government decides to  
13 evolve the program into something like a cap and trade, well then, there's plenty of time to get more  
14 elaborate.

15 I do think the government will have a host of information EIA can process for things like  
16 best practices and general trends within industry, so it would be useful.

17 MR. BROOKMAN: Thank you. Other comments? Yes? Bill Fang and then Rebecca.

18 MR. FANG: I think this is the place to talk about transferable credits, baseline  
19 protection, and credit for prior action in some detail. We do think that pursuant to the president's  
20 directive and the four-agency letter in July that DOE needs to address all three of these issues. And I'm  
21 going to go into this in some detail, if you'll bear with me.

22 As far as the legal authority question goes, we filed supplemental comments in  
23 September on that. We do think there is sufficient statutory authority to support all three of these  
24 concepts and that they are distinct concepts and desirable concepts.

25 On transferable credit, we'd liken that to a checking account. Reporting under that would  
26 be effective as of the -- whenever the date of the new guidelines, say 2003. In other words, transferable  
27 credits are something that companies could use now.

28 There are at least three contexts in which those would be useful or could be useful in the  
29 near future. One is in the states, New Hampshire and Massachusetts. One is possibly at the regional  
30 level with the Chicago Climate Exchange, as we understand it, will be coming out with some kind of  
31 voluntary trading program. And the third, of course, is international. If and when the Kyoto Protocol  
32 enters into force, maybe as early as the end of next year or the following year. This is a concern  
33 particularly for multinational companies, including ours.

34 On baseline protection, we liken that to kind of like a savings account. Again, that -- that  
35 reporting would be effective as of the date of new guidelines or perhaps 2003. However, baseline  
36 protection type of credits would not be used now but would be used for later. In other words, there's kind  
37 of a -- a banking function such as under the SO2 program, under the Clean Air Act.

38 So the credits could be used for future climate policy. They wouldn't necessarily be used  
39 now.

40 I do want to address a comment that David Doniger raised yesterday. He said, if we're in  
41 a purely auction-based system, then we don't need baseline protection.

42 Insofar as that comment goes, it's correct. However, as I pointed out in the breakout  
43 session yesterday, especially in this country, we're not aware of any emissions trading program that relies  
44 solely on -- on auctions, that is purely an auction-based system. All emissions trading programs that  
45 we're aware of are at least in part or wholly allowance-based or allocation-based. Therefore, there is a --  
46 a major need for a baseline protection program.

47 Finally, on the -- the subject of credit for past actions, this deals with the -- the subject  
48 noted in the July 8th letter, past reports since the inception of the 1605(b) guidelines in 1994. The  
49 baseline period as set forth by the statute is 1987 to 1990.

Again, reports that are -- the past reports under 1605(b) would be subject to the revised guidelines. There wouldn't be automatic crediting. There would have to be some kind of filtering or screening in order to get credits. It's -- we're not exactly sure whether you call this a checking type of account or savings account. Maybe it's kind of like a certificate of deposit that hasn't yet matured.

The final policy issue that I want to talk about is that the incentive -- there's an incentive issue here that is just huge for our industry and other reporters. And it's -- I've mentioned the Canadian baseline protection initiative a couple of times the last few days.

The point for the reporters who have already reported is that if they don't get any credit for what they've already done, then there's no incentive for them to do anything under the revised guidelines. It's -- it's a question of -- of -- of trust and faith in what the government is going to do.

If the government does not come through and provide some kind of crediting mechanism for these past reports, the reporters simply don't have an incentive to do anything in the next 10 years under the president's program.

On the other hand, if there is some kind of crediting given and the government in good faith provides a mechanism to -- to recognize and to provide credit for those past reports, then there is a huge incentive to do something in the next 10 years.

MR. BROOKMAN: Thank you. Thanks for being as concise as possible with that statement.

Rebecca?

MS. EATON: I wanted just to -- Rebecca Eaton, WWF. President Bush asked the Department and other agencies to recommend reforms regarding baseline protection and transferable credits. This appears to be a request for legislative recommendations because the administration has no authority under section 1605(b) or any other current law to ensure baseline protection or to give out transferable credits.

And I think that is important in this -- in this context, especially as we start talking about emission inventory versus emission reduction and whether it's a registry for one or the other.

I think the -- certainly, from my perspective, it makes much more sense to have this be a place where companies are registering their corporate-wide inventory in absolute terms and that we have seen what's happened historically in terms of companies documenting reductions when in effect -- and a lot of these were internal corporate reduction projects -- when in effect their overall footprint was increasing significantly. And I think it starts blowing out the integrity of this system.

MR. BROOKMAN: Thank you. Additional comments? A lot has been said among the last two commenters.

Please. Lee Ann?

MS. KOZAK: Lee Ann Kozak, Southern Company. In looking at this list of questions, I'd suggest that there is perhaps one portion of the process that's missing. And that's the question of whether submission of a report to 1605 automatically means that the reporter is asking for certification of credit for everything that's in there or what that portion of the process is.

I mean, as we've talked about significantly over the last two days, people file reports for a variety of reasons. Not necessarily everybody is seeking transferable credit for everything in the report.

It seems that there needs to be a portion of the project where the reporters can specify what, if any, portions of that they're seeking credit for.

MR. BROOKMAN: Thank you. Okay. Yes, please. Jim?

MR. HAVEN: When you're considering --

MR. BROOKMAN: Jim, say your name, please.

MR. HAVEN: Jim Haven. When you're considering credit for past actions and reporting, be sure to give credit for those companies and those reporters who have had negative emissions where a company had -- like this room. When the baseline is one when they started, every work bench was occupied. Now, with the economy and everything else, every third one is occupied.

1 They still have the same amount lights, same amount of air conditioning, and the base is there, but they're  
2 like a negative 100 percent. They really aren't saving anything as far as greenhouse emissions.

3 Now, but they've reported every year because they are participating with what's  
4 happening in the United States. And what the base of this program is, is to report close -- both the  
5 goodness and the badness so that we get a good picture.

6 Now, if you're only going to give credit to those who have had big savings in greenhouse  
7 gas emissions over the years, there's no need to report on consistency with the good and the bad.

8 MR. BROOKMAN: And I take it from your comment, it doesn't fully incent people to  
9 continue to participate or begin to participate?

10 MR. HAVEN: Right. Just -- even a certificate, an "atta-boy" saying, thanks for  
11 participating and we appreciate -- and the ones who really have done it, thanks for participating and  
12 helping to reduce so many -- but give something to them to keep them interested in the program.

13 MR. BROOKMAN: Okay. Thank you. Please, Miriam?

14 MS. LEV-ON: Miriam Lev-On on behalf of API. I wanted to reiterate the fact that the  
15 president has asked for suggestions on how to enhance the program and kind of looking forward to the  
16 period 2002 and 2012. And as such, in order to encourage new participants to come in, there has to be a  
17 determination by the DOE that the new baseline would be established for -- for the new participant. How  
18 you would handle those that are already reporting and they have a -- a 1987 and 1990 type of baseline  
19 would be a separate issue.

20 We're not saying that this data is not valid and it should -- you know, it definitely needs  
21 to be retained. And if it complies with the guidance for the data quality that is going to be established for  
22 the enhanced program.

23 But it has to be made clear to new participants and in order to encourage participation  
24 that this is a forward-looking program and the emphasis is on this period from 2002 to 2012. Thank you.

25 MR. BROOKMAN: Thank you. Yes, Mary Quillian?

26 MS. QUILLIAN: Mary Quillian, Nuclear Energy Institute. I agree, Miriam, that this  
27 should be a forward-looking program. But I also think that the -- the spirit of what the president is trying  
28 to do here is to recognize companies that have made reductions and want to make reductions in the near  
29 future. And that can't be ignored.

30 So no matter what you do with the baseline issues, you need to make sure the companies  
31 that have already been reporting into the program or are currently reporting into the program continue to  
32 have access to the recognition of what they've reported thus far.

33 MR. BROOKMAN: Thank you. Yes. Jim?

34 MR. HAVEN: Does this mean that if I have a company that's interested and I can only  
35 accept and report stuff into the EIA where they are having reductions? If that's all he's interested in, he's  
36 not interested in the rest of the companies, they might as well drop out if they -- not having reductions  
37 that he's going to want reported.

38 So you only want the goodness reported, is that correct?

39 MR. BROOKMAN: I don't -- Mary, go ahead.

40 MS. QUILLIAN: Mary Quillian, NEI. I guess that was reported -- I guess that was  
41 directed at me.

42 No, I -- I mean, I think that there -- you know, there are two reasons for this program. In  
43 my personal opinion, this was set up to figure out -- to help get a handle on what the greenhouse gas  
44 emissions are in the United States and have been in the United States.

45 But at the same time, what I believe the president is intending for the revisions to do is to  
46 set up a system where companies that make revisions now get those on the record so that there isn't a  
47 situation in the future where what they did today will come back and bite them on the rear in the future.

48 So, no, I don't think it's just for positive reductions. But I think you need to set up a  
49 system where reductions made now will be recognized in the future.

1 MR. BROOKMAN: Other comments and viewpoints? Yes, please?

2 MR. HAMME: Roy Hamme, Duke Energy. I'd like to get back to the concept of  
3 transferable credits. And consistent with my comments earlier today, Duke Energy does not believe the  
4 government needs to dabble in the field of defining what a transferable credit is or even -- even create  
5 structures to -- that go beyond what the market's already doing to take care of that.

6 The market already exists for trading emission reduction credits. Unfortunately, there is  
7 no real standardization yet. That's just beginning to get driven out.

8 There are lots of sellers out there. But if you take a look at the boards, there are no  
9 buyers. And why? That's simply because there's no limited commodity yet.

10 MR. BROOKMAN: Right.

11 MR. HAMME: We're starting to see some programs emerge, like the Chicago Climate  
12 Exchange, Climate Leaders, some other things where people are making commitments. And that may  
13 begin to generate a demand for those.

14 But the market needs to -- needs to evolve itself. I don't think there's a -- a good role for  
15 government in that process.

16 The other thing that that leads me to, and I diverge a little bit from the discussion here, it  
17 brings the question, is a ton a ton a ton, and will it always be so. I don't believe that's the case.

18 There are quantification differences between the different gases and different sources.  
19 There are different error bands in determining what a ton is. I think the market is going to evaluate those  
20 tons and pay accordingly.

21 So a ton of one gas from one source may well not be worth on the market what a ton of  
22 gas from another source or -- happens to be.

23 And you also have the problems of internationally-determined global warming potentials.  
24 Some of those are likely to change.

25 So you're going to have to deal with a complex system. I think it's too simplistic to try to  
26 get your arms around things in a way that creates everything that's the same. So I guess one thought -- I -  
27 - I have diverged some -- is perhaps we need to look not as -- not at a commodity market like corn or  
28 wheat but something more like a bond market where you have different grades and that sort of thing.  
29 And I think that will affect how you approach developing guidelines and things like that.

30 MR. BROOKMAN: Thanks for that metaphor. That's useful.

31 Rebecca, did you want to -- did I leave -- okay.

32 Any other comments on this array of issues? We've heard about transferable credits,  
33 baseline protection, credit for past action, and how to incentivize all this. Other comments on those  
34 issues? Yes, please. Paul Cicio?

35 MR. CICIO: Paul Cicio, Industrial Energy Consumers. We're -- as -- as consumers of  
36 energy, we are deeply concerned about the prospects of establishing transferable credits.

37 Not all industrials feel this way. There are always exceptions. But for the most part, to  
38 continue to have economic growth, we're going to use more energy. That's not to say we shouldn't be  
39 using the very best technology, innovative technology, to reduce the trajectory of the greenhouse gases  
40 per widget.

41 But the reality is, is that over the last 30 years industrial consumers have -- are putting  
42 out twice the widgets using the same amount of energy. Let me repeat that. They're producing twice the  
43 widgets over the last 30 years and using about the same amount of energy. That is an incredible  
44 improvement of utilization of energy.

45 And if you ask these consumers, you know, how much more is there to reduce, they'll tell  
46 you it gets very, very expensive. And they've reduced for purposes of not greenhouse gases, they've done  
47 so because of -- of horrendous global competition that has forced them to squeeze any cost out of the  
48 system, and energy is cost.

49 So getting back to transferable credits, transferable credits establishes a system of

1 winners and losers. And because this group of consumers have done so much already, there's not a lot  
2 that they can do. So they're going to be on the losing side.

3 So it's a system that benefits those who have not done much and it creates losers for  
4 those who have. So in that spirit, they're concerned.

5 Regarding baselines, there isn't any reason why, in the spirit of the president's mandate,  
6 that the DOE cannot provide guidelines, very clear guidelines, that can be useful to companies in  
7 establishing their baseline. It doesn't become a legal baseline in the sense of a government -- a  
8 government-sanctioned baseline, but it is guidelines that allow for a company to take the steps necessary  
9 to protect oneself if they feel they need to, given a future mandatory reduction requirement. Thank you.

10 MR. BROOKMAN: Thank you. Other general comments?

11 I'd like to go through these bullets kind of one by one. Additional comments on  
12 government review process? We've already -- we've -- we've touched on this. Specifics. The  
13 Department is seeking your advice on how they might do this. No?

14 How about documentation of reductions?

15 (No response)

16 MR. BROOKMAN: Additional comments on documentation issues in terms of  
17 managing the registry?

18 (No response)

19 MR. BROOKMAN: Let me note for the record, and anybody who reads this entire  
20 record would note, that many of these issues have been covered already. I'm just trying to assure we've  
21 covered them completely. That's what we're trying to do now.

22 Data -- DOE database and certified reductions. Any additional comments on that?

23 (No response)

24 MR. BROOKMAN: Have we talked much about transfers, documenting transfers? I  
25 don't think we have. I mean, I don't recall it. Do you want to -- can someone -- Mark Friedrichs?

26 MR. FRIEDRICH: This issue was meant to get at the question of whether the DOE  
27 database should track the -- the ownership of reductions or whether that should be done entirely outside  
28 of the 1605(b) database.

29 MR. BROOKMAN: Comments? Mary Quillian? We've heard some on this subject  
30 already, of course.

31 MS. QUILLIAN: Mary Quillian, NEI. I just think for simplification that if you devise a  
32 system where every credit gets some sort of serial number, and then if somebody wants to use that credit  
33 in the future, they obviously have to supply the serial number, that you reduce the burden of tracking.

34 There isn't -- there isn't a need for a government agency to be tracking the transfer of  
35 these credits.

36 MR. BROOKMAN: I see a few hot -- heads nodding up and down.

37 Other comments on this subject, documenting transfers?

38 (No response)

39 MR. BROOKMAN: And we have one more slide, Mike.

40 (Slide)

41 MR. BROOKMAN: Back to confidentiality issues on the registry itself. Should all data  
42 submitted to DOE be made publicly available. Can DOE effectively protect confidential data.

43 We've heard a couple of different thoughts on this subject. People have talked about the  
44 benefits and the utility of having a third party involved in gathering the data and submitting the data and  
45 that that is a buffer.

46 People have also talked about, under the present 1605(b) program, how it is possible to  
47 protect confidentiality under FOIA, right?

48 And other comments as well. Those are just a few I selected.

49 Additional comments on confidentiality issues related to managing the registry itself?



1 Bill? Bill Fang.

2 MR. FANG: Bill Fang, Edison Electric Institute. To reemphasize a point I made  
3 yesterday, in answering the question, can DOE effectively protect confidential data, clearly we think the  
4 answer is "yes." But not only can it, but we believe it should. And again, that's to incent participation.  
5 This is a voluntary program.

6 To the extent that DOE cannot protect -- or provide assurances of protecting  
7 confidentiality would be a disincentive. To the extent it can protect and provide assurances for  
8 protecting confidential data, then it would incent participation and encourage participation.

9 MR. BROOKMAN: Okay. Other comments on this subject? Let's go to the next slide.  
10 (Slide)

11 MR. BROOKMAN: We've already heard from EEI on their perspective on prior year  
12 reports. The question here is a process question.

13 Should there be a process. What would be the elements of a process to considering and  
14 revising past reports.

15 Do you want to expand on your metaphor, Bill Fang, about CDs that haven't reached  
16 maturity?

17 Thoughts on a process for considering and revising past reports for prior years. Do you  
18 want to -- do you want to -- do you want to be a little more specific about this? This is Margot Anderson.

19 MS. ANDERSON: Maybe it's a good thing. Margot Anderson, DOE.

20 The essence behind this question is, in the July 8th letter to the president, one of the 10  
21 recommendations was to propose a process for considering prior year reports. And we're trying to get  
22 some feedback on what that process might look like, how we might do that, and once the process -- if a  
23 process is in -- in place, then what does that mean for any revisions that might have to be done for past  
24 reports in order to meet the requirements of the process that we would consider for past reports, if that  
25 helps.

26 But that was one of the recommendations. And we're eager to hear some feedback on  
27 how we just might do that that would be consistent with what you think we need to be doing.

28 MR. BROOKMAN: Yes. Mary Quillian.

29 MS. QUILLIAN: I think the only reason there would be -- to go backwards and look at  
30 reports that have been filed prior to the -- the year that the revision begins would be if somebody -- if -- if  
31 the ability is there, and I would hope that the ability would be there, to go back and actually get  
32 transferable credit for reductions made since the beginning of 1605(b).

33 And if that were the case, clearly, the guidelines for issuing transferable credits which  
34 are going to be established in this revised version of 1605(b), you may have to go back and make sure  
35 you meet those guidelines for previous reductions and to possibly have to provide additional information.

36 And that -- that would be the only case, in my opinion, where you need to look  
37 backwards and revisit any filing that has happened up until now.

38 MR. BROOKMAN: Additional thoughts on this -- on this subject? Yes?

39 MR. CASHIN: Mike Cashin. I'm thinking about the existing 1605(b) reporting process  
40 where we have previous years of project reporting. And I have facilitated changes in some of the  
41 previous submittals and the process has accommodated that reasonably well.

42 But to use as an example, we have a -- a project where we planned it -- originally  
43 targeted about 3000 acres of short rotation woody crop, hybrid poplar. And then the rains came. The  
44 various fields flooded and the growth rates changed and the estimates in the field were upgraded, and we  
45 accommodated that accordingly. And it didn't make that much difference but we were trying to keep the  
46 quality up.

47 When you're talking about this question, are you saying you need a mechanism to do that  
48 or are you looking at in the context of being able to go back and create new projects? I don't understand  
49 what the -- the issue would be.

1 Are you trying to make a certified credit immutable so that once you have a credit that's  
2 in the program and that's been reported that you can't go back and change it, or -- or what?

3 MS. ANDERSON: The issue is more akin to what EEI was mentioning earlier. Given  
4 that there are any number of reductions currently reported in the 1605(b) program, what is the status of  
5 those reductions given the revised program that is geared or recommended to gear towards the issuance  
6 of transferable credits. How do we evaluate reductions that are already in -- already reported.

7 And one of the recommendations in the letter to the president said that -- that we would  
8 devise a process by which we would take a look at reductions already registered in 1605(b) to --  
9 presumably, to make a determination of their value in meeting any new requirements or their ability to  
10 meet any new requirements in the new 1605(b).

11 So the issue is really about evaluating issues already reported as opposed to going back  
12 and looking at already reported data to revise it because of some changes --

13 MR. BROOKMAN: For the record, that --

14 MS. ANDERSON: -- issue.

15 MR. BROOKMAN: That was Margot Anderson, for the record.

16 MS. ANDERSON: Thank you.

17 MR. BROOKMAN: Yes?

18 MR. STEADMAN: Yeah, this is Gene with Celanese Corporation. It's my perception,  
19 again, that the president and this 18 percent greenhouse gas reduction goal laid it out from a point now,  
20 not going back in the past. That's our perception. Someone else said the same thing. It's important to go  
21 forward.

22 So I'm really questioning, what's this look-back for anyway? What's the purpose other  
23 than to waste my and everybody else's tax payer dollars trying to straighten up books for people that are  
24 trying to gain the system or could gain the system.

25 So I don't think you'll ever get a level playing field or create the right class of the winners  
26 and losers by going back in time. My perception is that the right path is to go forward from today or  
27 whatever the point was when he said 18 greenhouse gas reduction. It had to be from some point, I  
28 presume. That's today. It didn't mean 1990, '85, '98.

29 And so that sense in going forward would be, well, gee, as Paul has mentioned, my  
30 company and a lot of other companies have paid to make energy reductions already not because of this  
31 report, because of intense global competition.

32 So therefore, since there's not going to be a cap rate or anything they've got to worry  
33 about in the future, there's no -- I don't lose anything by not having to back up since there's no reason to  
34 back up. There's nothing for me to gain from backing up.

35 But going forward, if you said, well, a transferable credit is recognition, well, great. You  
36 know, whatever improvements I make now, I'll get a certificate -- maybe it'll be suitable for framing -- or  
37 some other kind of recognition. Or maybe it'll be a basis for some future tax incentive to turn over to  
38 capital stock. That's great.

39 But that's just my perception. Why -- why do you want to go backwards. I don't  
40 understand that.

41 MR. BROOKMAN: Janet Ranganathan first, and then I'll go to, I guess, David.

42 MS. RANGANATHAN: Well, I actually have some sympathy with all the people that  
43 have been reporting for the last nine years. And I think there's two things here.

44 First of all, the -- the DOE is going to design this goal, a Canton reporting standard. And  
45 then there's a question of, well, of some subset of that information or maybe all of the information may  
46 be eligible for credit in some kind of scheme. It may be for baseline protection, it may be some tradable  
47 commodity.

48 So there's a question on the table for those who already reported. They could go back  
49 and redo their calculations according to the new Canton reporting standard. That may or may not be a

difficult task, depending on how much -- how different the new system is.

But I suspect that they probably wouldn't want to do that until they realize -- until they recognize that there's going to be some value to that. Maybe because there's going to be a trading scheme and there's going to be some sort of baseline protection.

So I think the option should be kept open for those who already reported information to go back and to redo their calculations according to the -- to the --- the new standards and to be able to propose that and put it forward. But they may not want to do that. They may be -- should be allowed to keep the options open and decide to do that in the event that that will have some value to them.

MR. BROOKMAN: I think David. Yes.

MR. FINNEGAN: The --

MR. BROOKMAN: David Finnegan.

MR. FINNEGAN: David Finnegan, Mayer, Brown, Rowe, May. I -- I agree with what Janet just said, but what I want to add to the fact is that the guidelines are a revision of existing guidelines under the existing statute that goes back to 1992. And under the present -- prior administration, they urged people to file information that -- file the information and the reporting. And it shouldn't be abandoned at this stage. It's no different than the IRS allows you to supplement your -- what you filed for your -- for tax returns and so forth.

And so that the objective is to -- if you can modify what you reported and upgrade it, whatever, so -- and as I understand earlier, EIA said that people have made revisions of what they filed for various and sundry reasons, including their -- their sort of desk book checking. It seems to me that's a perfectly legitimate point and it should be kept open and utilizing the new guidelines to the extent appropriate.

MR. BROOKMAN: Thanks --

MR. FINNEGAN: When it isn't a waste of tax payers' money.

MR. BROOKMAN: Do you have a comment? Yes.

MR. ALARCON: Carlos Alarcon, CO2 Financial. I was going to add that I'm not sure that the revised standards are -- are etched in stone. But this -- this addresses Gene's concern also from Celanese, is that there may be some windfalls created by -- not necessarily overall but maybe for a certain sector or certain industry if these -- if these -- if these standards are revised as to quantity and -- and quality.

So again, to address Gene, this may directly affect, you know, competitive -- competition and competitive value. So it would be something to keep an eye on as far as values go of transferability.

MR. BROOKMAN: Janet Ranganathan and then back to --

MS. RANGANATHAN: Yeah. Just to --

MR. BROOKMAN: -- Mark.

MS. RANGANATHAN: -- follow up on my point, I mean, I think that to not recognize what's already taken place that meets the new -- new standards is -- is a threat to every voluntary program in the country.

MR. BROOKMAN: Thank you. Mark?

MR. WHITENTON: It sort of begs the question, can a new filer file past data.

MR. BROOKMAN: Interesting point. Interesting question. Yes? What is your perspective on that?

MR. WHITENTON: I think if the data meets the new guidelines, why not. If you want participation, if you want information that EIA can use and process to better our understanding of what's going on in the industries, I think it would be useful.

MR. BROOKMAN: Other perspectives on that?

(No response)

MR. BROOKMAN: Okay. I want to make sure I give everybody a chance to comment in a final way on this particular slide. I've got one more to do and then we're done for the day.

(No response)

MR. BROOKMAN: Okay. Let's go to the next slide.

(Slide)

MR. BROOKMAN: There we go. Okay.

As I understand it, this cluster of words came directly from the president, right? The president's address says, not penalizing under future climate policy and refers to transferable credits as a possibility.

And so, I guess we want your thoughts on how the 1605(b) registry program at some point in the future could assure that it is not penalizing under future climate policy. We've already talked considerably in the last hour about transferable credits.

Is anything else to be said on this score?

MR. FRIEDRICH: One of the things we're trying to get at here is exactly what do participants feel that the Department should do to fulfill these objectives. What specific actions under the 1605(b) program could be taken to -- to fulfill those particular goals.

MR. BROOKMAN: Thank you. And for the record, that was Mark Friedrichs.

Other comments, specific actions the Department could take? Yes? Rebecca.

MS. EATON: Rebecca Eaton, WWF. I just wanted to let known that our -- my silence simply is because I -- I feel like I've said these things in the last day and a half.

MR. BROOKMAN: Thank you.

MS. EATON: I just wanted the record to show that.

MR. BROOKMAN: I think we've covered this pretty -- pretty well in the span of the last day and a half.

Other additional comments? Or persons that haven't spoken yet on this subject? Yes, Carlos?

MR. ALARCON: Carlos Alarcon, CO2 Financial. I just want to add that this -- I mean, it -- it's a great -- it's a great approach to allowing for all the things that can happen in the fairly -- fairly close set of events or the event arise. And in that, if we go to an international trading scheme or transfer, we can -- we can always -- we can always adapt what we have in place already. I think that's very clever.

I think what we're trying to prevent or what we're trying to mitigate is, I believe, that transferring or trading CO2 emission credits going forward will -- will make -- will make -- that will become a competition issue, a global competition issue, as it will -- as I believe it will reduce costs.

And so I think we're leaving that open and I think that's -- I think that's a good thing to do. Thank you.

MR. BROOKMAN: Thank you. Others that wish to comment that haven't fully made their views known over the span of the last day and a half? Yes, Paul Cicio.

MR. CICIO: I have -- I've already said plenty, but I'll add something new. All right. There's a perception based on the tee up here that transferable credits is a way of not penalizing under future climate.

One of the things that we have to keep in mind is that we cannot ignore the energy pie supply side when we're dealing with climate policy. The two are attached. I'll give you an example.

Implementing transferable credits provides incentives for companies to do -- to reduce their greenhouse gas emissions. Of course, that's very positive. But an easy way of doing that is converting from coal to natural gas. It reduces CO2.

But today we have a -- we have very high natural gas prices. We have natural gas prices around four dollars per MBTU. At these natural gas prices, we have manufacturers who are turning down manufacturing production as we speak, shipping production overseas, and then we're importing those energy-intensive products back into this country. And you wonder why we have a huge and increasing trade deficit.

So there are -- my point is, there are side elements to the -- what seems like a lofty issue.

1 But you have to look at the implications for the real world, that switching from coal to gas has serious  
2 implications.

3 Particularly, for example, we've had falling natural gas production in the lower 48 for the  
4 last three quarters in a row. So we have high prices, falling natural gas production, and we're going to  
5 encourage companies to switch from coal to gas?

6 Anyway, it's just not as clean and as simple and as beautiful as it may sound.

7 MR. BROOKMAN: Thank you. Yes, Janet Ranganathan.

8 MS. RANGANATHAN: Well, I think what Paul says is absolutely right. And this does  
9 raise some broader policy questions because the reality is that the price of coal does not really affect the  
10 real price of coal because the externalities aren't built in. And if they were, the choice would be obvious.

11 And so I think that, you know, that the issue has to be dealt with in a different way. I  
12 mean, either subsidies or taxes. That is the problem.

13 MR. BROOKMAN: Thank you. Other comments on this statement on the slide? Other  
14 final comments?

15 (No response)

#### 16 Wrap Up and Next Steps

17 MR. BROOKMAN: I think we're -- we're at the end of the day. And I just -- end of the  
18 working session. And I -- I would just like to stop for a moment.

19 We have created this list of participants, and I'll -- I guess maybe we'll just put them out  
20 on the back table, Mike, for people when they exit.

21 I'd also ask people, in your folder there's an evaluation form. Please pull it out and fill it  
22 out. We read them and we expect to learn from them, and we will.

23 And so having said that, I'm going to turn it over to Margot Anderson. And I just -- from  
24 my own personal perspective, I'd like to thank all of you for your focus and your good humor and for  
25 really being so cooperative and working so well together in the span of the last day and a half. It's made  
26 this possible. And I, frankly, was concerned that this may not be possible, to get through all of this  
27 content in this level of detail.

28 So my personal thanks to all of you. Margot Anderson.

29 (Applause)

30 MS. ANDERSON: I want to remind everybody about the way forward. We talked about  
31 it yesterday. Was it just yesterday?

32 We do have a website that you can provide written comments if you go back home and  
33 decide there's something more you need to say. If you're not going to be at another workshop, and I'm  
34 sure we'll see many of you in Houston and in San Francisco and in Chicago, or your other  
35 representatives, but there are written comments that you want to file, by all means, do so.

36 We are fully intending in spring to have proposed a proposal -- proposed new guidelines  
37 through the "Federal Register" process, as we mentioned yesterday. And there'll be a public comment  
38 period for that.

39 We will make revisions to the comments that -- to the proposed guidelines based on the  
40 comments that we receive. EIA will be working on new reporting forms throughout next year as well  
41 that will go through a comment period.

42 So stay with us. Pace yourselves. It's going to be a long and very busy year.

43 I want to say thank you to each of you that came here and spent the time to read the  
44 background papers, to think about what you were going to say, to say it succinctly, and to engage with  
45 each other. You may not have felt that it was as useful to you as it was to us, but this was absolutely a  
46 vital part of our process.

47 It's important not only to hear from you individually but to get you to talk to each other  
48 and to respond to the concerns that each industry group has because that helps us tremendously as we go  
49 forward and try and revise some guidelines that are going to be consistent with the many different views

1 that we have seen in this room.

2 I would be remiss if I didn't thank you for your patience and your contributions. And so I  
3 thank you very much and look forward to seeing many of you throughout the rest of the year.

4 I particularly want to thank Doug Brookman. We just gave him a round of applause. It  
5 was a really wonderful meeting, and I thank you very much for keeping us on time, in fact getting out  
6 early.

7 And Doug's going to be facilitating the next three, so if you want to see more of Doug,  
8 by all means, there's another incentive to come to our workshops.

9 I'd also like to thank Mike Rivest and Michael Scholan and Lisa Frantzis who helped us  
10 yesterday. Mike and Mike were -- have been instrumental over the last several months as we've put all  
11 this together. Thank you very much.

12 I have to thank our partners at EPA and at USDA and the Department of Transportation,  
13 the Department of State, the Council on Environmental Quality who helped us through this process as  
14 well.

15 And definitely thank my colleagues at the Department of Energy and at EIA who have  
16 worked tirelessly on the background papers, the logistical issues, and arguing among ourselves about all  
17 of these issues. Just as you have gone through them at your level, we certainly talk about them a lot at  
18 DOE about just how the system might work. So we are constantly thinking about this and talking about  
19 it.

20 And it's a pleasure to be able to speak with you about it. And again, I look forward to  
21 working with you throughout the next 12 months. Thank you very much.

22 (Applause)

23 (Whereupon, at 12:19 p.m., the proceedings were concluded.)  
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## 10. INDUSTRY BREAK-OUT GROUP REPORT BACK SLIDES

Voluntary Greenhouse Gas Reporting Workshops

## **Industrial and Other Large Sources Breakout Group**

**Voluntary Greenhouse Gas Reporting  
Public Workshops  
November 18-19, 2002  
Washington DC**

### **Are there entity-wide physical measures of output?**

- Commodities
  - Gas transmission company – through-put
  - Petroleum company – by barrel production  
(note: expect to change in the future due to regs)
  - Steel / Aluminum company – by ton of raw output
  - Chemicals – by pound
- Value Added Manufacturing
  - Widgets production – more difficult to quantify intensity measures across many industries
  - Heterogeneous goods (e.g., J&J) – don't use an intensity measure, had difficulty tracking.
- Service Industry
  - Waste Management – less control prior to landfill; have control over emissions once in the landfill



### **Who should choose output measures?**

- For commodities, it may be appropriate for DOE or other entity such as trade associations or even individual companies to choose output measures
- For diverse manufacturing, it may be more appropriate for the individual entity to develop / use its own metric
- Decreasing intensity does not necessarily mean decreasing tons of GHG, e.g., last decade of US performance

### **Need for Credibility**

- No consensus in group on what data should be reported
  - Absolute and/or intensity – one required? Both required?
  - If absolute data to be filed, confidentiality a major issue
- Should both Acme and Dudley Widgets receive credits?
  - Industry reps generally agreed that the Market will decide the value of a credit and that Government should not attempt to determine creditability or value

## **Protecting confidentiality**

- Concerns expressed about confidentiality, especially at facility level or by small firms – FOIA requests
- NGOs see transparency as key to credibility
- Possible solutions:
  - Third-party protection (e.g., as in some EPA programs)
  - Others?

## **Purpose of 1605(b) Program**

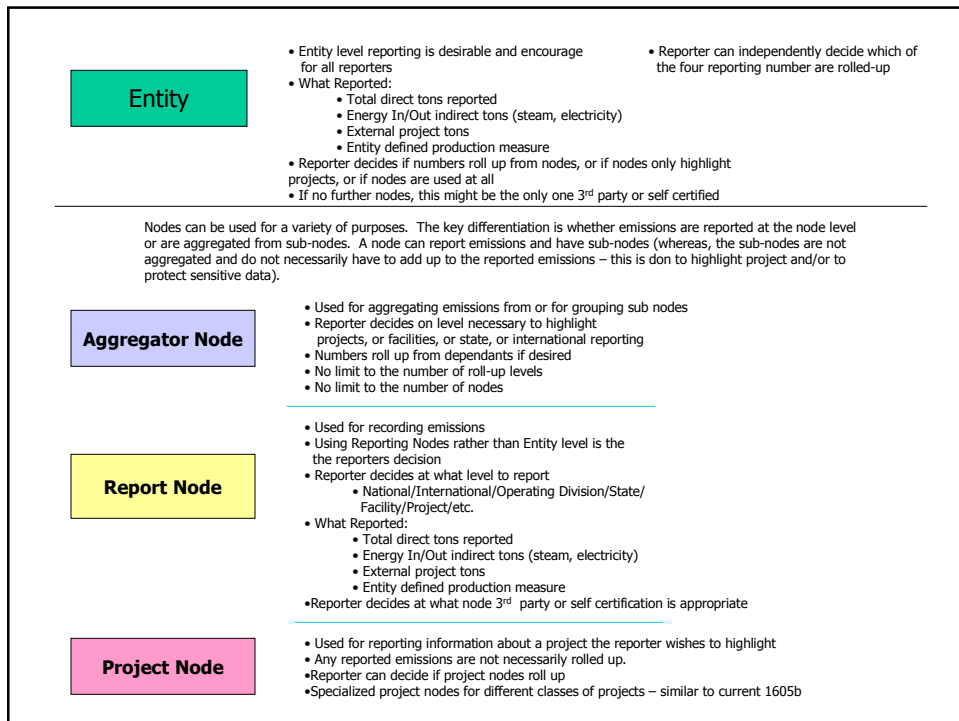
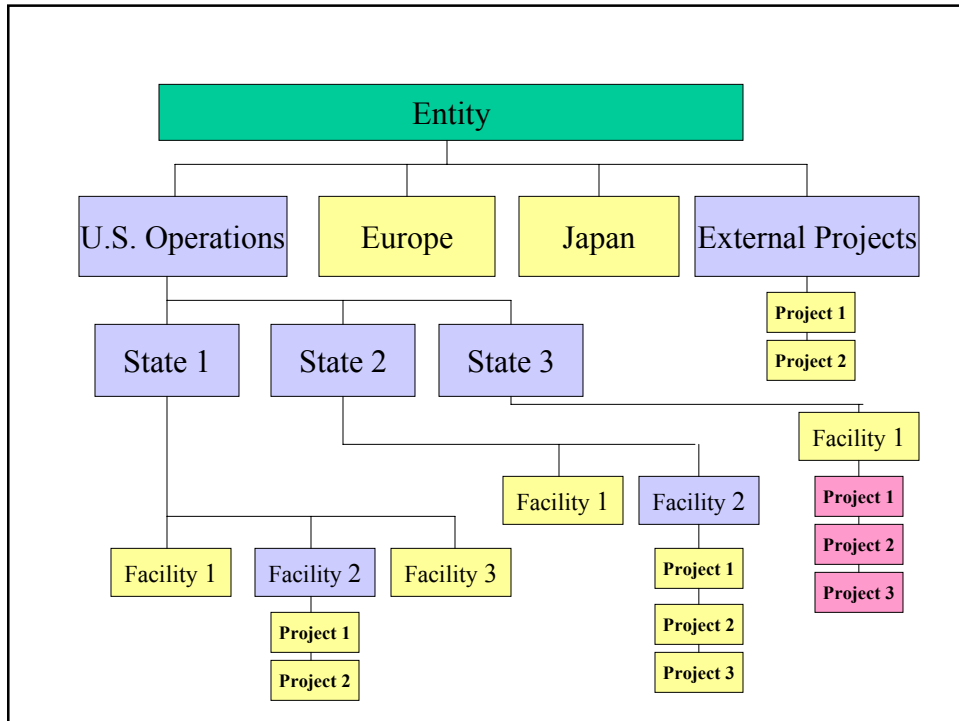
- To give companies meaningful guidelines
- Provide incentive to participate (notoriety)
- Concerns about stigmatizing (e.g., compared to others in your sector by Wall Street or stockholders)
- Consensus that 1605(b) intensity reporting by entities cannot be aggregated to the national intensity target – national data already available to calculate national intensity
- Will 1605(b) provide protection for absolute or intensity reduction actions taken now?

## **What to do with the Baselines?**

- No group consensus
  - Some argued no adjustment for “organic growth”
  - What to do with acquisitions, divestitures and closing plants?
  - Impact of other Government regulations (e.g., actions required by other Government regulations)

11. SUBMISSION TO THE RECORD:  
GREG MCCALL, AEP.  
RECOMMENDED STRUCTURE OF 1605(b)  
PROGRAM

Voluntary Greenhouse Gas Reporting Workshops

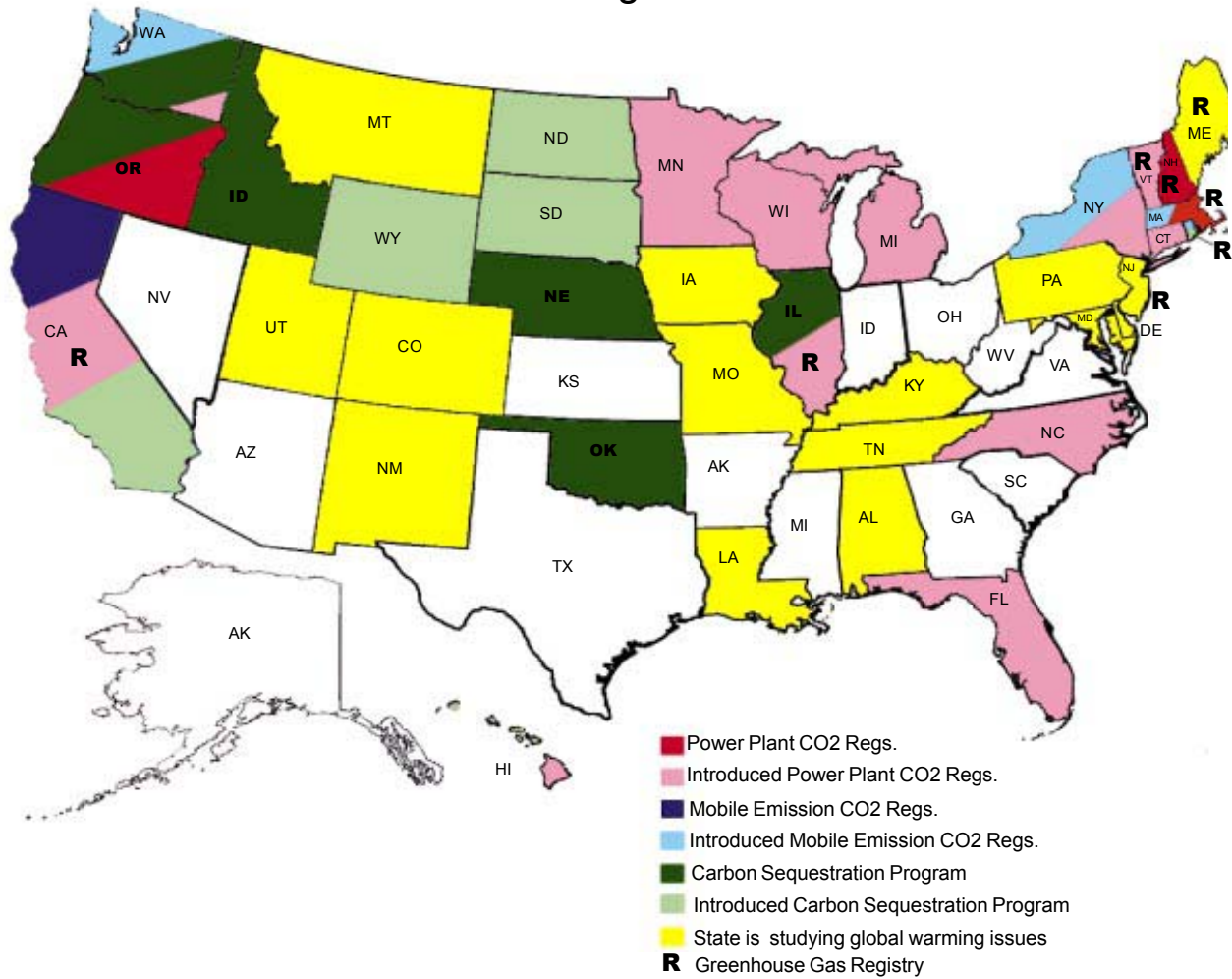


12. SUBMISSIONS TO THE RECORD:  
SANDY LIBBY BOURNE, ALEC:  
MAP OF GREENHOUSE GAS REGULATION IN  
THE STATES; AND  
BRIEFING BOOK: CO2 REGULATION IN THE  
STATES.

Voluntary Greenhouse Gas Reporting Workshops

# American Legislative Exchange Council

## Greenhouse Gas Regulation in the States



AMERICAN LEGISLATIVE EXCHANGE COUNCIL



# **Briefing Book: CO<sub>2</sub> Regulation in the States**

Last Updated: Nov. 4, 2002



# SUMMARY

With the failure of the Kyoto Protocol at the federal level, several states have taken the initiative to try to enact so-called “son-of-Kyoto” legislation at the state level. While many states are studying global climate change, twelve have introduced bills in the last legislative session to directly regulate the emissions of carbon dioxide and other greenhouse gases and two states (CA and NH) have passed bills.

ALEC has identified over 60 bills from the current legislative session that explicitly seek to regulate carbon dioxide, although there are many other measures and resolutions that list carbon dioxide as a pollutant. Additionally, taxpayer subsidies of alternative energy and renewable fuels are multiplying in the states as back-door approaches to eliminate carbon-based fuels from the nation’s energy mix.

The states that appear closest to regulating carbon dioxide emissions at this time are Illinois, Hawaii, Minnesota, New Jersey, New York, and Washington. California, Oregon, Massachusetts, and New Hampshire already have laws to regulate emissions.

**Action Plans:** Completed in 19 states (AL, CA, CO, DE, HI, IL, IA, KY, ME, MT, NH, NJ, NC, OR, PA, RI, TN, UT, VT, WA, WI), with 5 in progress (NM, MN, MO, NY, MA, MD) (Possibly 2 more in progress)

**Emission Inventories:** Completed in 37 states, with 4 in progress according to the EPA

**Emission Registries:** 8 states (CA, IL, ME, NH, NJ, TX, WI, VT); 3 states have registry’s under consideration (RI, CT, MA).

**International Agreements:** 7 states (CT, ME, MA, NH, RI, VT, and NJ)

**Mobile Emissions:** 1 state (CA)

**Renewable Energy Portfolios:** 11 states (AL, AZ, CA, CT, ME, MA, MN, NV, NJ, TX, VT)

**Emission Portfolios:** 2 states (AZ, MA)

**Source Labeling And Disclosure:** 8 states (CA, IL, ME, MA, NV, NH, NJ, PA)

**Direct limits on CO<sub>2</sub> Emissions:** 4 states, 1 county

**CALIFORNIA’s** governor signed into law AB 1493, which regulates vehicle emissions of CO<sub>2</sub>, on July 1, 2002. Directs the State Air Resources Board to reduce CO<sub>2</sub> emissions to the extent allowed by technology and economic impacts. Four states have adopted the California low emission vehicle standards (MA, ME, NY, and VT) and are the most likely to adopt the new California standard. Massachusetts law allows adoption of California emission standards after public hearings on the issue.

**OREGON** passed a law in 1997 (HB 3283) that limits carbon dioxide emissions from all new power fossil-fuel power plants built in the state. Power plants emitting CO<sub>2</sub> over acceptable limits must invest in sequestration projects or pay a fee for the extra tonnage. However, over

80% of Oregon's electricity generation comes from hydroelectric dams so the law makes no substantial changes to energy markets at the present time.

**MASSACHUSETTS** Final regulations approved in May 2001, "[310 CMR 7.29 Emissions Standards for Power Plants](#)" establishes output-based emission rates for NO<sub>x</sub>, SO<sub>2</sub> and CO<sub>2</sub> and establishing a cap on CO<sub>2</sub> and Hg emissions. CO<sub>2</sub> emissions cannot exceed historic emissions for fossil fuel plants built before 1977 (this affects 6 plants). The net CO<sub>2</sub> average emission rate cannot exceed 1800 lbs./MWh in a year. Sequestration or other off-site reductions can substitute for reductions at the power plant. These rules were put into place administratively after the Dept. of Environmental Protection determined it had the authority to regulate ambient air quality when it affects human health (i.e., global warming is a threat to human health).

**NEW HAMPSHIRE** passed H.B. 284 in March of this year to cap CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and mercury emissions from existing fossil fuel power plants. It establishes trading and banking system for CO<sub>2</sub> to help companies reach the caps.

**NEW YORK's** Suffolk County as enacted Law 6/01 which sets an emission standard no greater than 1,800 lbs/MWh, an emissions trading system, and a goal to reduce emissions by 20%. Nassau County and New York City have proposed similar laws and New York's governor Pataki has been studying emission caps.

## ALABAMA –

**Action Plan:** Completed.

**Emission Inventory:** Completed.

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** Solar Energy Portfolio Standard

**Source Labeling and Disclosure:** None

### **Legislation:**

**HB 465** Signed (1998): Prohibits promulgation of state regulations intended to reduce greenhouse gas emissions prior to ratification of Kyoto Protocol by US Senate and enactment of implementing legislation by US Congress.

**SJR 23** Signed (1998): Urges President Clinton not to sign the Kyoto climate change protocol.

## ALASKA —

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

### **Legislation:**

**HJR 33** Passed house, referred in senate, died on adjournment. (April, 1999): Urges the United States Senate to decline to ratify the treaty from the United Nations Framework Convention on Climate Change adopted in December 1997 at Kyoto, Japan.

## ARIZONA –

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** Requirement that utilities produce electricity using a certain percentage of low- or zero-emitting energy technologies.

Renewable Portfolio: Requirement that utilities buy a specific percentage of their electricity from renewable energy sources.

**Source Labeling and Disclosure:**

### **Legislation:**

**HR 2001** Passed house, died on adjournment (April 13, 1998): Urges the US Senate not ratify the Kyoto treaty under its present terms and enact Legislation prohibiting the adoption of an executive order or regulation attempting to make effective any provision of the treaty.

**HCR 2022** Held in senate, died on adjournment (April, 1999): Opposes implementing any provisions of the Kyoto Protocol before its ratification. Requests AZ Department of Environmental Quality to not propose any new regulations or submit new regulations to the federal EPA for reducing greenhouse gases.

## ARKANSAS —

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

# CALIFORNIA –

**Action Plan:** [1997 Global Climate Change: Greenhouse Gas Emissions Reduction Strategies for California](#)

**Emission Inventory:** Completed

**Emission Registry:** California Climate Action Registry. Voluntary. Established by SB 1771 (2000) and modified by SB 527 (2001).

**Mobile Emissions:** Requirement of low- and zero-emission auto sales.

HB 1493 (2002) requires all 2009 vehicle models to have the maximum feasible reduction in carbon dioxide.

**International Agreements:** None

**Portfolio:**

Emission Portfolio: Rules will be adopted by 2003 for uniform emission standards (CA HLTH & S sect. 41514.9).

Renewable Energy Portfolios: Private utilities must increase the percentage of power bought from renewable sources by 1% per year (goal is to reach 20% by 2017).

**Source Labeling and Disclosure:** Retail Electricity Disclosure Program and Green Labeling – utilities must list fuel sources for customers.

**State Regulations:** CA STR & HWY s 164.56 The legislature will allocate \$10 million annually for the Environmental Enhancement and Mitigation Program Fund, which provides grants to sequester vehicle CO2 emissions among other things.

## Legislation 2001-2002:

**AB 1493** Signed by the Governor. Requires the State Air Resources Board to adopt regulations to achieve the “maximum feasible reduction of CO2” emitted by non-commercial trucks. Same as AB 1058.

**AB 1560** Chaptered, Sept. 27, 2001. Vehicle emission testing stations will adopt equipment standards which will test for hydrocarbon, CO, and CO<sub>2</sub> emissions.

**AB 2650** Enacted. Fines trucks for idling engines more than 30 minutes at ports of entry to reduce air pollution. CO<sub>2</sub> listed as a pollutant.

**ABX1 75** Passed House (objectionable language amended out 3/5/01), in Senate committee. Created power plant emission standards for CO<sub>2</sub>.

**SB 527** Signed by Governor. Requires the adoption of industry-specific greenhouse gas reporting standards for the Climate Action Registry. *The registry already exists and is voluntary.*

**SB 532** Passed Senate, Failed in Assembly Committee. Creates a renewable portfolio standard program, which establishes a system of tradable renewable energy credits. Utilities would be required to purchase credits to meet portfolio targets.

**SB 812** Chaptered. Encourages development of carbon sequestration projects to meet g. gas emission goals. Creates uniform reporting rules for emissions “to facilitate their recognition in any future regulatory regime.”

**SB 1038** Signed. Renewable energy portfolio requirement - 17% of publicly owned utilities energy production must come from renewable sources. Substituted for SB 530.

**SB 1078** Signed by Governor. Requires the state's private utilities to increase the share of electricity they sell to customers that comes from renewable sources by 1% a year. The goal is to reach 20% by 2017

**SJR 20** Chaptered (September 26, 2002). Memorializes the President of the United States to take proactive steps to curb greenhouse emissions and urges the President to sign the Kyoto Global Warming Agreement of 1997.

**Legislation 1998-2000:**

**SB 1771** Chaptered (September 30, 2000). Establishes the "California Climate Action Registry," a nonprofit public benefit corporation for the purpose of administering a voluntary greenhouse gas (GHG) emissions registry. The registry would record and register voluntary greenhouse gas emission reductions made by California entities after 1990. Also establishes emissions baselines against which any future federal greenhouse gas emission reduction requirements may be applied.

**SB 1253** Vetoed (Oct. 9, 1999). Requires any state agency with jurisdiction over matters affecting climate change to update greenhouse gas emissions inventory by January 1, 2001.

**SB 1941** Vetoed (Sept. 1998): Requires the State Energy Resources Conservation and development Commission in consultation with the State Air Resources Board to establish an inventory of state sources of g. gas emissions and to advise state, regional, and local agencies on cost-effective technologically feasible methods to reduce the production of g. gases.

**AB 2727** Introduced, but not heard. (1998): Requires the State Air resources board by regulation to adopt standards for greenhouse gas emissions for all fuels by December 31, 1999.



## COLORADO —

**Action Plan:** Completed.

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

### **Legislation 2001-2002:**

**SR 14** Resolution supporting conservation as a method for reducing g.gas emissions.

### **Other Legislation:**

**SJR 23** Senate concurred in House amendments (May 4, 1998). Disapproves of the Kyoto Protocol

# CONNECTICUT –

**Action Plan:** None.

**Emission Inventory:** None

**Emission Registry:** CT's governor has signed the NEG-ECP action plan, which aims to develop a regional registry, but the state has taken no further action.

**International Agreements:** Signatory of the New England Governors and the Eastern Canadian Premiers "Climate Action Plan 2001."

**Mobile Emissions:** None

**Portfolios:**

- By 2009, 6% of an electricity producers output must be from Class 1 renewable sources, and an additional 7% from Class 1 or 2 sources (CT ST sect. 16-245a).
- Establishes performance standards for NO<sub>x</sub>, SO<sub>x</sub>, CO<sub>2</sub>, CO, and Hg emitted per megawatt/hour of electricity produced. A program for trading emission credits or offsetting reductions may be implemented. This will go into effect when 3 states of the northeastern states' Ozone Transport Commission have adopted such a standard (CGSA Ch. 446C. 22a-174j).

**Source Labeling and Disclosure:** Records of CO<sub>2</sub> emissions to be maintained by the PUC (CT ST s 16-245y)

**State Regulation:**

- The Office of Policy and Management is directed to make goals toward the reduction of CO<sub>2</sub> emissions. Progress reports are to be submitted annually to the Legislature (CT ST s 16a-27)
- The Commissioner of Environmental Protection may require a new emission permit applicant to plant trees or grass to offset CO<sub>2</sub> emissions. (CGSA Ch. 446C. Sect. 22a-174d)
- Public Act 90-219, HB 5696 (1990): Connecticut passed the first state global warming law to require specific (although indirect) actions for reducing CO<sub>2</sub>. The Act establishes energy conservation measures, including revisions to the building code to maximize energy efficiency and requirements that the state purchase energy efficient appliances and vehicles. It establishes goals for improving and monitoring public transportation. Furthermore, the Act allows the Environmental Protection Commissioner, in connection with air discharge permits, to require trees or grass to be planted to offset carbon dioxide emitted into the atmosphere. The Act also reduces the ability of municipalities to provide tax abatement for multilevel parking garages.

**Legislation 2001-2002:**

# DELAWARE –

**Action Plan:** [Delaware Climate Change Action Plan](#)

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation:**

**HR 49** Passed House (January 29, 1998): Requests the President not to sign the Kyoto Protocol, nor to submit same for ratification to the Senate, until and unless the Protocol is revised consistent with US Senate Resolution 98, to include specific scheduled commitments for developing countries to mitigate greenhouse gas emissions within the same compliance period as required for developed countries.

# FLORIDA –

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation 2001-2002:**

**FL SB 2472** *Language substituted out 3/13/02*. Directs CO2 power plant emissions to be capped at 1990 levels by 2007. Also caps SO2, NOx, and Hg.

## **Other Legislation:**

**SR 2032** Failed passage (May 1, 1998). Request the President not to sign the Kyoto Protocol nor submit it for ratification until it is amended consistent with US Senate Resolution 98, which includes specific scheduled commitments for developing countries to mitigate greenhouse gas emissions within the same compliance period as required for developed countries.

# GEORGIA –

**Action Plan:** None

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation:**

**SR 230** Read 3rd time and committed, died on adjournment (May 15, 2000). A resolution urging the US Senate and the President to reject the Kyoto Protocol.

**HR 441** Died on adjournment (May 15, 2000). A Resolution opposing the Kyoto Protocol. Resolves that Georgia won't consider either a regulatory, statutory, or policy proposal that calls for reductions in greenhouse gas emissions before Senate ratification of protocol, that the state will consider alternative voluntary proposals to the Kyoto Protocol that reduce greenhouse gas emissions without compromising the economic security of the US.

# HAWAII –

**Action Plan:** [Hawaii Climate Change Action Plan](#)

**Emission Inventory:** Completed.

**Emission Registry:** None

**Mobile Emissions:** None

**Portfolios:** By 2003, 7% of net electricity sales must be from renewables; increasing to 9% by 2010 (HI ST sect. 269-92).

**Source Labeling and Disclosure:** None

**Sequestration:** Numerous resolutions have been introduced expressing opposition to a scientific experiment for injecting carbon dioxide into the ocean near Hawaii.

**State Regulations:**

Section 226-18, Hawaii Revised Statutes read that as part of the state's energy objectives, state facilities will strive to reduce, avoid, or sequester g.gas emissions among other goals.

## Legislation 2001-2002:

**HB 2513** Died upon adjournment. Beginning 2005, power plants will be charged \$.25 to \$1 /ton of CO<sub>2</sub> emissions for the CO<sub>2</sub> Emissions Reduction Special Fund. The bill encourages upgrading or retiring plants, using renewables, improving end-use efficiency, and funding sequestration programs. Same as SB 2771.

**HCR 64** Adopted. Requests federal govt. to enact stronger energy policies to encourage g.gas emission reduction including energy efficiency and encouraging the switch to renewable fuels. Same as HR 64.

**HCR 179** Died upon adjournment. Same as SCR 96.

**SB 2179** Signed by Gov. Each state agency shall reduce g.gas emission 30% by 2012 from 1990 baseline. The state will encourage the public to reduce emissions through renewable energy.

**SB 2771** Died upon adjournment. Same as HB 2513.

**SCR 96** Died upon adjournment. Dept. of Health requested to develop an action plan for reducing CO<sub>2</sub> emissions.

## Legislation 1999-2000:

**HB 2428 & SB 2769** Passed House (March 28, 2000). Adds a new objective to the State's energy facility system planning objectives concerning the reduction of greenhouse gas emissions.

**SB 1253** Died on adjournment (January, 2000). Allows the director to set and collect fees for the actual mitigation of greenhouse gases released by the permittee. Allows those fees to be spent by creating carbon sinks through carbon- offset forestry projects, and establishing a system to trade

carbon credits

**HR 230** Signed (1999). HCR 261, SR 88, & SCR 202 requesting the convening of a meeting to consider means to attract carbon investments to mitigate global warming through sustainable forestry in Hawaii.

### **1998 Legislation**

**HCR 77** In committee, died on adjournment (April 20, 1998). Affirms support to improve energy efficiency and renewable energy as a means of reducing greenhouse gas emissions in Hawaii. Develops the Hawaii Climate Change Action Plan that will identify and recommend ways to reduce greenhouse gas emissions.

**HCR 81** Introduced & re-referred to committee (April 20, 1998). Calls for the Senate to support the Kyoto Protocol.

**SR 88 and SCR 185** Introduced & re-referred to committee (April 1, 1998). Requests the President, Congress, and the Governor to take steps to save consumers money through promotion of alternative energy measures that reduce global warming.

**HB 3411** Introduced & referred to committee (February 20, 1998). Allows monies in the clean air special fund ... to be used for global warming tree planting programs and other air pollution grant programs allowed under S105 of the CAA.

## IDAHO —

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

### **Legislation 2001-2002:**

**SB 1379** Signed by Governor, Session Law Ch. 365. Establishes a Carbon Sequestration Advisory Cmt. to provide guidance for a carbon trading system and create a carbon sequestration fund. Same as SB 1064.

### **Legislation 1999-2000:**

**SCR 132** Signed (March, 1999). Charging the Director of the Department of Health and Welfare and the Administrator of the Division of Environmental Quality to refrain from commitments pursuant to the Kyoto Protocol.



# ILLINOIS –

**Action Plan:** [Climate Change Action Plan for Illinois](#)

**Emission Inventory:** Completed

**Emission Registry:** Voluntary. Created by SB 372 (2002)

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** Disclosure of Fuel Mixes and Emissions (Including Nuclear) (220 ILCS 5/16-127)

**State Statute:**

- Rejects the Kyoto Protocol and any attempts by state agencies to implement it without legislative approval. (415 ILCS 140/10). Effective 1998.
- The goal of Illinois is that 5% of the state's energy come from renewable sources by 2010, and 15% by 2020 (IL St Ch. 415, sect. 5/9.10).

## Legislation 2002-2002:

**HB 63** Died upon adjournment. Creates a goal of 5% of the state's energy from renewable sources by 2010, and 15% by 2020. The Agency will report by 2004 whether there is a need for control of fossil fuel emissions including a banking program for CO<sub>2</sub>. Very similar to HB 1599.

**HB 842** Signed by Governor, Public Act No. 92-264. Creates the Carbon Sequestration Advisory Committee which is to report to the legislature by Feb. 2002 on how to proceed with sequestration programs.

**HB 885** Died on Adjournment. Creates cap on aggregate emissions of SO<sub>x</sub>, NO<sub>x</sub>, Hg, and CO<sub>2</sub> from power plants.

**SB 372** Signed by Governor, Public Act No. 92-264. Establishes stricter limits on SO<sub>2</sub>, NO<sub>x</sub>, and Hg emissions, and creates a carbon banking system for certifying credits for voluntary offsets of g. gas emissions. Goal of the state that 5% of the State's energy production be derived from renewable sources by 2010; increases to 15% by 2020. Language regarding CO<sub>2</sub> caps was amended out.

# INDIANA —

**Action Plan:** None

**Emission Inventory:** Completed

**Emission Registry:** None

**Mobile Emissions:** None

**International Agreements:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation:**

**SCR 20** Passed (1998). Calls upon the President of the United States not to sign the Kyoto Protocol, and if submitted, calls for the Senate to reject it unless it is consistent with US Senate Resolution 98.

## IOWA –

**Action Plan:** [Iowa Greenhouse Gas Action Plan](#)

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

### **Legislation:**

**HB 246** In Cmt., died on adjournment (2000). Environmental protection commissions and the department of natural resources shall refrain from adopting any new rules mandating the reduction of greenhouse gases until such time as the Kyoto Protocol is adopted by the United States. Also provides that state and private participation in voluntary emissions reductions is not prohibited.

# KANSAS —

**Action Plan:** None

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation:**

**SCR 1619** Introduced, died on adjournment (June 24, 1998). Urges the US government not to sign or ratify the Kyoto Protocol unless it includes a specific commitment for developing countries to mitigate greenhouse gas emissions.

## KENTUCKY –

**Action Plan:** Climate Change Mitigation Strategies for Kentucky [Full Report](#)

**Emission Inventory:** Completed

**Emission Registry:** None

**Mobile Emissions:** None

**International Agreements:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

### Legislation:

**SB 300** Signed (April 9, 1998). Prohibits the promulgation of regulations or permit conditions to limit the emission of greenhouse gases pursuant to the Kyoto Protocol for the purpose of reducing global warming until authorized by the General Assembly or by federal statute. This law specifically allows participation in voluntary initiatives to reduce emissions of greenhouse gases. (KRS Title 18 Ch. 224 Sect. 224.20-125).

# LOUISIANA –

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation:**

**HCR 33** Died on adjournment. Creates a Global Climate Change Policy Commission to assess options for voluntary g.as emission reduction, sequestration projects, etc.

**HCR 26** Adopted. Commends American Electric Power, the Conservation Fund, and the U.S. Fish and Wildlife Service for planting trees at the Catahoula Lake Nat'l Wildlife Refuge because it sequesters carbon and improves the environment.

**SCR 14** Adopted (5/30/02). Creates a commission to evaluate and coordinate state policy options to mitigate the projected impact of global climate change and direct the timely implementation of the President's Global Climate Change Policy Initiatives

## MAINE —

**Action Plan:** [State of Maine Climate Change Action Plan](#)

**Emission Inventory:** Completed

**Emission Registry:** Voluntary. (HP 78, signed 2001).

**International Agreements:** Signatory of the New England Governors and the Eastern Canadian Premiers “Climate Action Plan 2001.”

**Mobile Emissions:** Repealed effective 2003: The Clean Car Incentives Pilot Program which encouraged owners to scrap vehicles that did not meet California's low-emission vehicle certification standard (ME ST T. 10 sect. 393).

Adopts the California LEV standards (ME ST T. 38 sect. 585-D).

**Emission Portfolio:** Each electricity provider must provide no less than 30% of its power from renewable or "efficient" resources (ME ST T. 35-A sect. 3210).

**Renewable Portfolio:** Renewable portfolio standards that set a standard or target for renewable energy as a proportion of the overall electricity fuel mix.

**Source Labeling and Disclosure:** Yes. Public Law 1997, Ch. 316 (Feb. 23, 1999): The legislation, passed as part of a broader electricity restructuring package, requires a disclosure label showing electricity customers price, resource mix, and CO2, NOx, and SO2 emissions.

### Legislation 2001-2002:

**HP 78** (LD 87) Signed by Governor. Creates a voluntary g.gas emission registry.

**HP 1066** Signed by Governor, Resolve No. 28. Dept. of Environmental Protection directed to monitor climate change impacts on Maine and develop a system for reporting statewide emissions of g. gases. Creates a voluntary registry of actions taken after 1989 to reduce g.gas emissions.

## MARYLAND —

**Action Plan:** In Progress. Executive order signed March 13, 2001. “Greenhouse Gas Reduction Action Plan.” The order also sets goals for energy generated from renewable sources, energy efficiency in state buildings and purchased products, waste diversion or recycling and alternative fuel vehicles.

**Emission Inventory:** Completed in 2001.

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** (Pub. Util. Comp. Sect. 7-516). Executive Order in 2001 states that 6% of energy procured for state government offices must come from renewables.

**Regulations:** The Maryland Dept. of the Environment is authorized to establish ambient air quality standards for substances for which there are no federal standards, such as carbon dioxide and other greenhouse gases.

**Source Labeling and Disclosure:** None

### Legislation 2001-2002:

**HB 334** Heard in cmt., withdrawn from consideration. Requires state agencies and legislative panel to study and report by Jan. 2003 on actions to reduce g.gases, establishing a mandatory registry, and creating a credit trading system.

**HB 1066** Died upon adjournment. Creates a Climate Change Taskforce to study climate change and recommend prevention and mitigation measures. Also establishes a g.gas registry.

### Legislation 1999-2000:

**SB 248** Withdrawn (March 30, 2000). Requiring the Dept. of Environment to establish a registry of voluntary reductions in greenhouse gas emissions, adopt regulations, and conduct a study on whether to establish a particulate matter registry.

**HJR 23** In Rules Cmt., died on adjournment (1999). Urges US Senate to withhold consent from Kyoto Protocol unless developing countries commit to reducing greenhouse gas emissions.



## MASSACHUSETTS –

**Action Plan:** In progress.

**Emission Inventory:** None

**Emission Registry:** In development according to the state DEP.

**International Agreement:** Signatory of the New England Governors and the Eastern Canadian Premiers “Climate Action Plan 2001.”

**Portfolios:** Emission Portfolio: The Dept. of Environmental Protection shall create performance standards for emissions deemed to be of concern to public health (Title 2, Ch. 25A, 11F).

Renewable Portfolio: An additional 1% of sales shall be from renewable sources by 2003, increasing by .5% annually until 2009; and an additional 1% of sales every year after (MA ST 25A sect. 11F).

**Mobile Sources:** Massachusetts has adopted the CA LEV standards to date, but the recent California legislation on regulating vehicle CO<sub>2</sub> emissions has not been put into regulations yet. By law, the Dept. of Environmental Protection shall adopt vehicle emission standards based on California's standards after public hearings (MA ST 111 sect. 142 K).

**Source Labeling and Disclosure:** Yes. (Title 22, Ch. 64, 1F (6)). Power plants must print CO<sub>2</sub> emissions on customer bills.

**State Regulations:**

- Final regulations approved in May 2001, “[310 CMR 7.29 Emissions Standards for Power Plants](#)” establishes output-based emission rates for NO<sub>x</sub>, SO<sub>2</sub> and CO<sub>2</sub> and establishing a cap on CO<sub>2</sub> and Hg emissions. This affects 6 power plants in MA. CO<sub>2</sub> emissions cannot exceed historic emissions for fossil fuel plants built before 1977. The net CO<sub>2</sub> average emission rate cannot exceed 1800 lbs./MWh in a year. Sequestration or other off-site reductions can substitute for reductions at the power plant. Administered by the Department of Environmental Protection, the rules were amended to include CO<sub>2</sub> caps after hearings determined it was a pollutant of the ambient air. The Dept. also determined their authority extended to protection of ambient air and that increasing CO<sub>2</sub> concentrations were a threat to human health.
- Executive Order #5 (July 23, 2002). Directs all state agencies to develop policies that reduce greenhouse gases among other environmental goals.

**Legislation 2001-2002:**

**HB 2211** Sent to study. DEQ directed to co-ordinate with other states in the Northeast to establish a regional CO<sub>2</sub> cap at 7% below 1990 emissions from power plants.

**SB 2319** Signed by Governor, Ch. 236 of Acts of 2002. Includes a grant program for climate change mitigation; available for communities that complete an emissions inventory and establish an emissions reduction plan. Same as SB 2312 and HB 4909.

**HB 3649** In Committee 3/19/01. An excise tax shall be established on vehicles based on fuel efficiency to encourage the purchase of the least CO2 emitting and most fuel-efficient within each size class. The models achieving the most fuel efficiency shall be assessed at 0%, and the models achieving the least shall be assessed at 10%.

**Legislation 1999-2000:**

**HB 4262** Reported from Cmt., died on adjournment (1999). Authorizes the committee on Energy to make an investigation and study of certain House documents concerning electrically operated vehicles, the greenhouse effect, oil burners and energy consumption in new and existing buildings.

## MICHIGAN –

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** Electricity generators must provide CO2 emission characteristics and fuel mix information to customers (MCLA 460.10r).

### **Legislation 2001-2002:**

**SB 693** In Senate Committee. Sets emissions limits on SO<sub>x</sub>, NO<sub>x</sub>, Hg, and CO<sub>2</sub>.

**HR 113** In Committee. Memorializes the President and the Congress of the United States to increase efforts to address the issue of global warming and to implement policies to reduce greenhouse gases.

### **Legislation 1997-2000**

**HB 4651** Passed (December, 1999). The state environmental agency shall not propose or promulgate a rule to reduce greenhouse gases unless specified by the legislature; expend funds to reduce emissions of greenhouse gases pursuant to the Kyoto Protocol; or submit to the US EPA or any Federal agency any legally enforceable commitments related to the reduction of greenhouse gases unless the Senate ratifies the Protocol and legislation is enacted implementing it.

**HCR 70** Passed (1997). Urges the President to reject any agreement on limiting greenhouse gas emissions that apply restrictions only to developed nations and exempts other nations.

# MINNESOTA –

**Action Plan:** In progress.

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** Renewable Energy Resource Portfolio Standards

**Source Labeling and Disclosure:** None

**State Regulations:** Division of Lands and Forestry Statute Section 88.82. (1999) Minnesota Releaf program is established in the Department of Natural Resources to encourage, promote, and fund the planting, maintenance, and improvement of trees in this state to reduce atmospheric carbon dioxide levels and promote energy conservation.

Minnesota Public Utilities Commission. January 3, 1997. The Minnesota Public Utilities Commission voted to accept a \$.30 - \$3.10 /ton (1995 dollars) of CO2 valuation for the global warming impacts/costs of carbon emissions from utility power plants. They did so on the basis of a damage-cost assessment conducted by the Minnesota Pollution Control Agency – the first time in the country that economic valuation techniques have been used to establish damage costs from CO2 emissions in a contested case. The values shall be updated using the Gross National Product Price Deflator Index as data becomes available from that index (Rule E-999/CI-00-1636, May 3, 2001).

## **Legislation 2001-2002:**

**HF 3144** Died upon adjournment. Establishes power plant emissions limitations; authorizes the PUC to order a public utility to evaluate emissions reductions options and to implement emissions reductions initiatives. Same as SF 3078.

**SF 3078** Died upon adjournment. Same as HF 3144.

**SF 3431** *Language amended out before final passage.* In responding to power project bids, the Public Utilities Commission will take into account reduction in g.gas emissions (among other things) as a factor in approval.

**HF 2921** Introduced, died on adjournment. Same language as SF 3431.

## **Legislation 1995-2000:**

**HF 2524 & SF 2332** In committee, died on adjournment (February, 2000). By January 1, 2001, and annually thereafter, the commissioner of the pollution control agency shall inform the public about the estimated effects of climate change on the ecology of the various regions of the state.

**HF 949 & SF 1008** In Committee, died on adjournment (1995). A bill requiring, as part of the environmental review of proposed projects and activities, an analysis of the effect of the projects or activities on total CO2 emissions in order to minimize the burden on existing industry to

reduce carbon dioxide emissions. Senate File substituted for House File and indefinitely postponed.

# MISSISSIPPI –

**Action Plan:** None

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation:**

**HB 890** Signed (July, 1999). An act to restrict the Mississippi Commission on Environmental Quality from proposing or implementing any rule related to greenhouse gas emissions as defined by the Kyoto Protocol, to be repealed upon ratification of the Kyoto Protocol by the Senate, or upon action by the United States Congress authorizing reduction of emissions of greenhouse gases, as those gases are defined by the Kyoto Protocol, for the purpose of addressing the adverse effects of climate change.

# MISSOURI –

**Action Plan:** In progress.

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None. Legislation was introduced.

## **Legislation 2001-2002:**

**HB 1599** Died on adjournment 2002. Electricity emissions labeling. CO2 and other emissions to be printed on customer bills. Same as HB 766.

**HB 766** Died on adjournment 2001. Same as HB 1599.

## **Legislation 1998:**

**HCR 14** In committee, died on adjournment (1998). Opposes ratification of the Kyoto Protocol.

## MONTANA —

**Action Plan:** Completed

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None



## NEBRASKA –

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

**Sequestration:** Directs the DNR to quantify and verify CO<sub>2</sub> sequestration on agricultural land to enhance the ability of farmers to participate in any system of g.gas emission trading (NE Rev.St. 2-5301).

### **Legislation 2001-2002:**

**LR 390** Died upon adjournment. Directs Agricultural Cmt. to study the feasibility of implementing recommendations of the carbon sequestration study.

### **Legislation 1999-2000:**

**LB 957** Created the Carbon Sequestration Advisory Committee to document and quantify reductions related to agricultural practices; to provide duties; and to create the Carbon Sequestration Assessment Cash Fund.

## NEVADA –

**Action Plan:** None

**Emission Inventory:** Completed

**Emission Registry:** None

**Mobile Emissions:** None

**International Agreements:** None

**Portfolios:** By 2004, 5% of electricity sales must come from renewables; increases to 15% by 2013 (NV ST 704.7821).

**Source Labeling and Disclosure:** Law passed 2001. Programs requiring utilities to label or disclose the content of electric generating fuel sources.

### **Legislation 2001 – 2002:**

**AB 197** Enacted June 2001. Electricity emissions labeling law. CO2 and other emissions to be printed on customer bills. Same as AB 661.

### **Legislation 1999-2000:**

**SJR 14** In committee, died upon adjournment (1999). Urges US Senate to refrain from ratifying the Kyoto Protocol.

## NEW HAMPSHIRE –

**Action Plan:** [New Hampshire Climate Change Action Plan](#)

**Emission Inventory:** Completed

**Emission Registry:** Voluntary. SB 159 (1999)

**International Agreements:** Signatory of the New England Governors and the Eastern Canadian Premiers “Climate Action Plan 2001.”

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** Disclosure of Resource Mix Required

**State Regulations:** New Hampshire signed into law a bill to cap CO<sub>2</sub> emissions.  
NH employs a full-time state global warming specialist

### Legislation 2001-2002:

**HB 284** Signed by Governor. Establishes caps for SO<sub>x</sub>, NO<sub>x</sub>, Hg, and CO<sub>2</sub> emissions from existing fossil fuel electric generation plants. Permits the banking and trading of emissions reductions to achieve compliance with the caps. Sets goal of reducing CO<sub>2</sub> emissions to 7% below 1990 levels by 2007. After 2010, the cap on CO<sub>2</sub> emissions will be lowered. (NH Statutes, T. X, Ch. 125-O)

### Legislation 1999-2000:

**SB 159** Signed (1999). Establishes a registry for voluntary greenhouse gas emission reductions to create an incentive for voluntary emission reductions. Requires the Department of Environmental Services to study the potential for a similar registry for particulate matter.

## NEW JERSEY –

**Action Plan:** The [New Jersey Climate Change Action Plan](#). Goal is to reduce emissions 3.5% below 1990 levels by 2005 through a combination of “no regrets” strategies including: energy conservation, innovative technologies, pollution prevention, waste management – MSW landfill gas recycling, and natural resources preservation. Administrative Order 1998-09.

**Cap and Trade Program:** Voluntary program under New Jersey’s Open Market Emission Trading Program. Tradable credits include carbon dioxide (CO<sub>2</sub>); methane (CH<sub>4</sub>); nitrous oxide (N<sub>2</sub>O); certain hydrofluorocarbons (HFC), certain perfluorocarbons (PFC); and sulphur hexafluoride (SF<sub>6</sub>). Participating companies and individuals are compensated from a “societal benefits charge” fund, which is assessed on all electricity users. (N.J.A.C 7:27-30.2 and 30.5)

**Emission Inventory:** Completed.

**Emission Registry:** Mandatory for facilities with a high potential to emit criteria pollutants. According to a rule change finalized Feb. 4, 2002, these facilities must now register emissions of CO<sub>2</sub> and methane (34 N.J.R 695 (a)).

**International Agreements:** A letter of intent was signed by New Jersey and the Netherlands on June 5, 1998 to work cooperatively to reduce greenhouse gas emissions. The signing was witnessed by the Center for Clean Air Policy. The letter recognizes the importance of following the spirit of the UN Framework for Climate Change Convention and the Kyoto Protocol.

**Mobile Emissions:** New Jersey adopted the California LEV program in 1993, but later replaced it with the national LEV program with EPA approval in 1999.

**Portfolios:** “The board shall adopt an emissions portfolio standard applicable to all electric power suppliers and basic generation service providers, if two other states in the PJM power pool comprising at least 40 percent of the retail electric usage in the PJM Interconnection, L.L.C. independent system operator or its successor adopt such standards.” Section 38 of P.L.1999, c. 23.

Renewable Energy Portfolio: 1.5% of all electricity sales must come from renewable sources, increasing to 4% by 2012. Section 38 of P.L.1999, c. 23. The state government has committed to procuring 15% of its energy from green sources.

**Source Labeling and Disclosure:** Yes. Section 38 of P.L.1999, c. 23 (C.48:3-87)

### State Regulations:

New Jersey Department of Environmental Protection: Emissions Statements, Operating Permits, Civil and Administrative Penalties. Taking comments/public hearings (March 8, 2002). New

Rules (*N.J.A.C. 7:27-21-21.1 through 21.10; N.J.A.C. 7:27-22.1, and 22.31; and N.J.A.C. 7:27A-3.2 and 3.10*). These amendments would enhance New Jersey's stationary source emissions inventory primarily by requiring the reporting of emissions of additional air contaminants. Emitting facilities will be classified as either high or low emitters and they will be required to report different contaminants. Higher emitting facilities to report emissions of two greenhouse gases, carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>), beginning with the 2002 Emission Statements. <http://www.state.nj.us/dep/aqm/curformp.htm>

**Legislation:**

**AB 1628** In Committee. Strengthens Source Labeling and Disclosure law and requires emission portfolio standard to be developed immediately. Imposes a 9% tax on all energy produced from a generation facility that violates DEP air quality standards. Intended to discourage customers from buying energy from cheaper coal-fired plants. *Also introduced in 2000 as SB 1345.*

## NEW MEXICO –

**Action Plan:** In progress  
**Emission Inventory:** Completed  
**Emission Registry:** None  
**Mobile Emissions:** None  
**International Agreements:** None  
**Emission Portfolio:** None  
**Renewable Portfolio:** None  
**Source Labeling and Disclosure:** None

### **Legislation 2001-2002:**

### **Legislation 1999-2000:**

**HJM 431** Died upon adjournment (1999). Urging the Senate of the United States to not ratify the treaty from the United Nations Framework Convention on Climate Change adopted in December 1997 at Kyoto, Japan.

**HM 30** Failed (1999). Requesting Congress to commit to reductions of greenhouse gas pollution and to ratify the Kyoto Protocol.

**SM 11** Failed (1998). Urges the US Congress to prevent the ratification of the Kyoto Protocol unless developing nations commit to limiting greenhouse gas emissions.

## NEW YORK –

**Action Plan:** In progress.

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** Adopted the California LEV standards

**Portfolios:** None

**Source Labeling and Disclosure:** None

**Governor's Proposal:** Governor's Task Force on Global Warming has recently received recommendations to reduce CO<sub>2</sub> emissions 40% below 1990 levels by 2010. The recommendations were drafted by a consulting firm at the request of the Task Force. The New York Times reported that the governor would adopt a cap less stringent than 40%, which would not apply to vehicle emissions, but he would prefer a Northeast state regional approach.

**Local Government:** New York Suffolk County as enacted Law 6/01 which sets an emission standard no greater than 1,800 lbs/MWh, an emissions trading system, and a goal to reduce emissions by 20%. Nassau County has proposed the same system as adopted by Suffolk County. The New York City Council has proposed an emissions performance standard for generating facilities over 25 MW located within the city, establish an emission rate less than the 1997-1999 average, and create a CO<sub>2</sub> trading system

### Legislation:

**AB 431** In Assembly Cmt. Creates a CO<sub>2</sub> cap and trade system that allows emissions no greater than 1997 levels by 2003. Increases investments in energy efficiency and alternative fuel electricity generation.

**AB 5577** Passed Assembly, in Senate Cmt. Reduces Hg emissions. Creates cap on CO<sub>2</sub> by 2007 less than 1990 emissions, and a permit trading system. Strengthens NO<sub>x</sub>, and SO<sub>2</sub> regulations.

**AB 6991** In Committee. Creates a working group to conduct an insurance risk assessment of the potential consequences of climate change for New York in terms of financial losses from climate change related health, property and liability insurance losses.

**AB 10363** In Committee. Creates cap on emissions of CO<sub>2</sub> by 2007 that are 7% less than total 1990 emissions and a trade system. Strengthens SO<sub>x</sub>, NO<sub>x</sub>, and Hg caps. Also modifies some power plant siting procedures. Same as SB 7296.

**AB 11895** Introduced. Requires NY to adopt California's g.gas and CO<sub>2</sub> emissions standards for vehicles manufactured after 2009 (refer to CA A.B. 1493).

**SB 4790** In Committee. Establishes a global climate change coordinating council to make recommendations on reducing g.gas emissions 25% below 1994 emissions by 2009.

**SB 5115** In Committee. Creates CO2 emissions caps by 2007 that is less than amount emitted in 1997, and a permit trading system. Also targets Hg, NOx, and SOx emissions.

**SB 7296** Introduced. Same as AB 10363.



# NORTH CAROLINA –

**Action Plan:** [State Action Plan for Reducing Greenhouse Gas Emissions for North Carolina](#)

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## Legislation:

**SB1078** Signed by Gov. Ch. SL 2002-4. Strengthens emission standards of NOx and SOx from coal burning facilities. The bill also directs the Division of Air Quality to study issues related to setting standards for carbon dioxide emissions from coal-fired generating units and other stationary sources of air pollution. Same as HB 1015.

# **NORTH DAKOTA –**

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation 2001-2002:**

**SCR 4043** Adopted 3/19/01. Directing the legislature to study the desirability of promoting carbon sequestration programs. The Legislative Council shall draft legislation to implement any recommendations.

## **Legislation 1999-2000:**

**HCR 3004** Adopted 2/2/00. Resolution urging Congress not to pass or implement the Kyoto Protocol.

# OHIO —

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation 2001-2002:**

**SCR 28.** Adopted 3/21/02. Opposes US Congress bill S. 556 which labels CO2 as a pollutant to be regulated.

**HCR 27** In Committee, died on adjournment (2001). Memorializes the US Senate not to ratify the Kyoto Protocol.

## **Legislation 1998-2000:**

**SCR 23** In Committee, died on adjournment (1998). Memorializes the US Senate to not ratify the Kyoto Protocol and memorializes the President of the US not to sign any instrument of ratification related to that treaty.

**HRC 26** Passed (June 26, 1997). Memorializes the US Senate to reject ratification of any international treaty that would require the US to meet set targets to control GHGs.

# OKLAHOMA –

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation 2002-2002:**

**HB 1192** Signed (April 2001). Creates the Carbon Sequestration Act Advisory Committee to document and quantify reductions related to agricultural practices, and the Carbon Sequestration Assessment Cash Fund. 27A O.S. 2001, Section 3-4-102.

## **Legislation 1999-2000:**

**SJR 6** Signed (April 26, 1999). Restricts the legislative and executive branches from implementing global warming preventative measures until the United States Senate has ratified the Kyoto Protocol. Does not impede states or private participation in voluntary initiatives to reduce greenhouse gases.

# OREGON –

**Action Plan:** [Report on Reducing Oregon's Greenhouse Gas Emissions](#)

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Emission Portfolio:** None

**Renewable Portfolio:** None

**Source Labeling and Disclosure:** None

## State Regulations:

- Siting legislation that establishes a CO2 standard requiring new utilities to emit 17% less than most energy efficient plant available. The bill capped CO2 emissions at 0.7 pounds of CO2 per kilowatt-hour for base-load natural gas-fired power plants; in 1999 the cap was lowered to 0.675 pounds per kilowatt-hour. Energy facilities may meet the standard by implementing projects directly, or paying a per-ton of CO2 offset equal to \$0.57 per ton into a Climate Trust which purchases offsets.
- Utilities are allowed to charge customers for costs associated with small carbon sequestration programs (ORS sect. 757.266).

## Legislation 2001-2002:

**HB 2200** Signed by Governor, (ORS 526.783). State Forester shall develop a forestry carbon offset system for the registration, transfer or sale of forestry carbon offsets. Applies for all state and private forests.

## Legislation 1997-2000:

**HB 3541** Vetoed (July 24, 1999). Directs Office of Energy to study and report on actions taken in collaboration with private business to offset, mitigate or directly reduce emissions of greenhouse gases.

**HB 3283** Signed (June 26, 1997). Siting legislation that establishes a CO2 standard for new power plants at 17% less than most energy efficient plant available. Caps CO2 emissions at 0.7 pounds of CO2 per kilowatt-hour for base-load natural gas-fired power plants.

# PENNSYLVANIA —

**Action Plan:** Completed

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** Disclosure of information to enable consumers to make informed choices regarding the purchase of all electricity services offered by the provider are required.

## Legislation 2001-2002:

**HR 200** In Committee. Requires state agencies to develop a g.gas inventory and a strategy for reducing net emissions.

**SB 5** *Language amended out before final passage.* Appropriations bill: \$250,000 for departmental study on state g.gas emissions and developing a strategy for emission reduction. Same as HB 2489.

**SB 553** In committee. Requires electric distribution companies to track emission characteristics (i.e., fuel types and emissions of SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub>).

## Legislation 1997-2000:

**HR 343** In Committee, died upon adjournment (1998). Urging the President not to sign the Kyoto Protocol, and urging the United States Senate not to ratify the Protocol unless it is amended to comply fully with United States Senate Resolution No. 98.

**SR 134** Signed (June 9, 1998). Memorializes the President and US Congress not to approve the Kyoto Protocol on Global Climate Change.

**HR 260, SR 74, SR 101** Adopted (1997). A resolution calling upon the President of the United States to avoid entering into any new climate treaty commitments pursuant to the Berlin Mandate that could adversely affect the United States; and calling upon the United States Senate to reject any proposed protocol or amendment not in compliance with Senate Resolution No. 98.

## RHODE ISLAND –

**Action Plan:** [Rhode Island Greenhouse Gas Action Plan](#)

**Emission Inventory:** None

**Emission Registry:** RI's governor has signed the NEG-ECP action plan, which aims to develop a regional registry, but the state has taken no further action.

**International Agreements:** Signatory of the New England Governors and the Eastern Canadian Premiers "Climate Action Plan 2001."

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

### Legislation 2001-2002:

**HB 7543** In Committee (February 5, 2002). Directs the Dept. of Environmental Mgmt. to develop plans for fossil fuel and greenhouse gas reduction and would exempt from taxation certain alternative energy equipment. The bill requests state agencies to define a process to comply with the Kyoto Protocol and reduce greenhouse gases by 5.2% by 2012.

**HB 5649** In Committee (2001). Provides for a Rhode Island Climate Change Initiative to encourage private property owners to manage and maintain woodlands so as to maximize carbon sequestration in forests throughout the state. Assigns responsibility for monitoring public and private forest management projects to the state conservation committee.

**HB 7127** Introduced. To reduce g.gas emissions, the state will charge a fee on non-fuel efficient vehicles each time the vehicle is registered.

**SB 2485** Introduced. Same as HB 7127.

### Legislation 1999-2000:

**HB 6899.** Passed House, died on adjournment (June 27, 2000): Responds to Climate Change issue by encouraging private property owners to maintain woodlands for sufficient time so as to maximize atmospheric carbon conversion to biomass.

## **SOUTH CAROLINA –**

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

### **Legislation:**

**HB 4761 and SB 1132** Signed (April 1, 1998). Memorializes the President to not to sign the Kyoto Protocol or to submit the same for ratification to the US Senate unless the Protocol is amended or otherwise revised, consistent with the US Senate Resolution 98; includes specific scheduled commitments for developing countries to mitigate GHGs within the same compliance period.



## **SOUTH DAKOTA –**

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

### **Legislation:**

**SB 126** Failed (January 19, 2000). Creates Carbon Sequestration Advisory Committee to examine methods for reducing greenhouse gas emissions.

**HCR 1004** Passed Senate (February 14, 1998). Urges the US Senate to reject the Kyoto Protocol on global warming.

## TENNESSEE –

**Action Plan:** [Tennessee Greenhouse Gas Emissions Mitigation Strategies](#)

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## TEXAS –

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** Yes – executive order

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** Renewable Portfolio Standard requires that all electricity providers obtain renewable energy capacity, finance construction of renewable energy facilities, and develop new renewable energy resources by 2009. Energy producers can meet the standard by developing renewable energy capacity or by purchasing Renewable Energy Credits.

**Source Labeling and Disclosure:** None

### State Regulation:

Decision by the Texas Natural Resource Conservation Commission (TNRCC) regarding Greenhouse Gas Inventory and Monitoring. [Texas Natural Resource Conservation Commission. Docket No. 2000-0845-RUL](#) (August 23, 2000). Directs g.gases to be inventoried and a registry established for emission reductions. By Dec. 2001, the TNRCC will issue recommendations for reducing emissions.

### Legislation:

**HB 3777** In committee, died upon adjournment(1999). Calls for the Sunset Advisory Commission to examine activities in the state contributing to global warming, actions that can be taken to reduce emissions, and the potential for creating jobs in this state relating to businesses, technologies, and efforts needed to reduce the contributions to global warming made by activities occurring in Texas.

## UTAH –

**Action Plan:** [Utah Action Plan](#)

**Emission Inventory:** Completed

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

### **Legislation:**

**SJR 9** Passed House (February 19, 1998). Urges the President not to sign the Kyoto Protocol, submit it to Congress for consideration, nor initiate strategies to mitigate GHGs until the protocol is amended to require developing countries to mitigate emissions within the same compliance period as developed countries. Calls upon the Governor to "prohibit Utah state agencies from implementing any strategies to reduce greenhouse gases unless the United States ratifies any protocol to, or other agreement regarding, the Framework Convention on Climate Change."

## VERMONT –

**Action Plan:** [Fueling Vermont's Future: Vermont Comprehensive Energy Plan and Vermont Greenhouse Gas Action Plan](#)

**Emission Inventory:** Completed

**Emission Registry:** In development. Vermont's governor signed the NEG and ECP's action plan which calls for the development of a greenhouse gas registry and issued an executive order in Aug. 2002 authorizing a commission to develop guidelines for the registry.

**International Agreements:** Signatory of the New England Governors and the Eastern Canadian Premiers "Climate Action Plan 2001."

**Mobile Emissions:** Adopted the California low emission vehicle standards.

**Portfolios:** Requirement that utilities buy a specific percentage of their electricity from renewable energy sources.

**Source Labeling and Disclosure:** None

### Legislation 2001-2002:

**SJR 73** Died on Adjournment. Resolution to pursue all means of reducing g.gases and launch the VT Greenhouse Gas Action Plan.

### Legislation 1998-2000:

**HB 736** Died on adjournment (May 18, 1998). Adopts the provisions of the energy plan and greenhouse gas action plan produced by the Department of Public Service; encourages the recovery of methane for electricity generation from farm manure; requires that all new vehicles offered for sale meet emissions standards set by the state of California.

# **VIRGINIA –**

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation:**

**SJR 58** Signed (1998). Memorializes Congress to prevent ratification of the Kyoto Protocol, a treaty that would impose on industrialized countries reductions in emissions of the gases thought to cause global warming until developing countries commit to limiting such emissions as well.

# WASHINGTON –

**Action Plan:** [Greenhouse Gas Mitigation Options For Washington State](#)

**Emission Inventory:** Completed

**Emission Registry:** None

**Mobile Emissions:** None

**International Agreements:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## Legislation:

**HB 1921** Died on adjournment. Washington should strive to emit no net g. gas emissions by the year 2020. Establishes a WA Climate Center to be a central clearing house for emission and mitigation activities and to make recommendations on capping CO2 emissions.

**HB 1922** Died on adjournment. Studying and recommending capping g.gas emissions by 2003; eliminating net emissions by 2020; reducing vehicle g.gas emissions. Same as SB 5530.

**HB 2326** Signed by Gov. Establishes WA Climate and Rural Energy Development center to be a non-regulatory clearinghouse of info on climate change and g.gas emissions. The Center will study ways to reduce emissions including cap and trade systems. Same as SB 6619 and SB 5674.

**HB 2327** Died on adjournment. All new power plants are responsible for permanently mitigating all g.gas emissions at actual market cost through mitigation fees. Same as SB 6744.

**SB 5530** Died on adjournment. Same as HB 1922.

**SB 5912** *Language amended out.* Original bill expedites siting of new power plants for companies that commit to meet CO2 reduction standards (6 months for those meeting standards vs. 24 months for traditional power plants).

**SB 6718** Died on adjournment. Requires the state government to conduct its business with no net increase in g.gas emissions from 2000.

**SB 6744** Died upon adjournment. All new power plants are responsible for permanently mitigating all g.gas emissions at actual market cost through mitigation fees. Same as HB 2327.

## Legislation 1999-2000:

**HB 5121** Passed Senate (January 21, 2000). Establishes a carbon storage program as an economic incentive to maintain long-term forest production.

**SB 6070** In committee, died on adjournment (April 25, 1999). Calls for a study analyzing the potential effects of global warming on Washington and possible mitigation efforts.

# WEST VIRGINIA –

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation 2001-2002:**

**HR 20** Introduced 2001. Memorializes Pres. Bush for not including CO2 caps in his National Energy Bill.

## **Legislation 1998-2000:**

**HB 4228** Signed (April 1, 1998). Prohibits the state division of environmental protection from modifying any agency rule which implements the provisions of the United Nations Framework Convention on Climate Change treaty and its proposed reductions of limitations on GHGs. Prohibits the division of environmental protection from entering into any agreement with any federal agency relating to limiting the state's GHG emissions.

**HCR 3** Passed Senate, died on adjournment (January 20, 1998). Requests the President of the US not to sign the Kyoto protocol to the UN FCCC.



# WISCONSIN –

**Action Plan:** [Wisconsin Climate Change Action Plan](#)

**Emission Inventory:** Completed

**Emission Registry:** Yes.

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

## **Legislation 2001-2002:**

**AB 860** Failed passage. Calls for reducing NOx, SOx, and CO2 emissions below 1990 levels. Same as SB 456.

**SB 456** Failed passage. Same as AB 860.

**SJR 32** In Committee (April 25, 2001): A resolution stating opposition to actions by President George W. Bush against the environment. The focus is on issues relating to the Kyoto Protocol.

## **Legislation 1999-2000:**

**SB 287** Signed (February 8, 2000). Requires DNR to establish and operate a system for registering reductions in greenhouse gas emissions if they are made before required by law.

## WYOMING –

**Action Plan:** None

**Emission Inventory:** None

**Emission Registry:** None

**International Agreements:** None

**Mobile Emissions:** None

**Portfolios:** None

**Source Labeling and Disclosure:** None

### **Legislation 2001-2002:**

**HB 47** Signed by Gov. A bill to create the Carbon Sequestration Advisory Committee to document and quantify reductions related to agricultural practices; to provide duties; and to create the Carbon Sequestration Assessment Cash Fund.

**HB 129** Enrolled and Chaptered. Appropriates money for cataloging carbon storage activities in the state.

### **Legislation 1999-2000:**

**HB 171** Signed (1999). Prohibits the promulgation of state regulations intended to reduce emissions of greenhouse gases prior to ratification of the Kyoto Protocol and enactment of implementing legislation by the United States Congress.

## **THE NEW ENGLAND GOVERNORS & THE EASTERN CANADIAN PREMIERS**

Members are: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Brunswick, Newfoundland and Labrador, Nova Scotia, Prince Edward Island, and Québec.

In August of 2001, the New England Governors and the Eastern Canadian Premiers (NEG-ECP) signed an agreement for a comprehensive regional Climate Change Action Plan to jointly reduce regional GHG emissions. The Plan seeks to reduce regional GHG emissions to 1990 levels by 2010, reduce emissions by 10% below 1990 levels by 2020, and eventually reduce emissions sufficiently to eliminate any dangerous threat to the climate (75-85% below current levels). It also calls for a regional standardized GHG emissions inventory and registry. The plan includes measures to adapt regional economies and infrastructure to the negative impacts predicted to result from climate change.

Similar pollution reduction efforts in this region include the successful Acid Rain Reduction Plan and the Mercury Action Plan. Action in these two areas indicate that the Climate Change Action Plan is likely to be implemented should be taken seriously.